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Corruption in Emerging Countries: A Matter of Isomorphism

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This paper, based on neo-institutional literature, focuses on the influence of organizational isomorphism on corruption in emerging countries. A questionnaire was administered in face-to-face interviews with top executives in firms across various economic sectors in emerging countries. Our findings lead us to conclude that corruption is influenced by coercive, mimetic and competitive isomorphism. This study indicates that the higher the quality of a given institutional framework, the lower the level of corrupt behaviour. Furthermore, we suggest that corruption is explained by mimetism within the same economic sector. We thus conclude that a firm is more likely to resort to corruption if its competitors already adopt corrupt behaviour.

INTRODUCTION

Corruption is often characterized as one of the single greatest obstacles to economic and social development (World Bank, 2000; United Nations, 2002, 2008; Aguilera & Adera, 2008). Despite its negative impact, corruption has spread worldwide for diverse reasons including the low salaries earned by civil servants, the availability of economic rents from which bribes may be extracted and/or the under-development of legal systems (Shleifer & Vishny, 1998; Rose-Ackerman, 1978, 1999). A key reason for the survival of corruption is the weakness of institutional frameworks. Indeed, the higher the quality of an institutional framework, the lower the chances of corruption (World Bank, 1997, 2000). Social, cultural, economic and political institutions undoubtedly influence societies and organizations (Scott, 1995, 2001) and these institutional forces may explain why organizations have become increasingly similar (DiMaggio & Powell, 1983; Powell & DiMaggio, 1991) and pursue similar actions including corrupt behaviour.

Many authors agree on the following definition of corruption: "*a manipulation of powers of government or sale of government property, or both by government officials for personal use*" (Shleifer & Vishny, 1993; Jain, 1998). This definition is quite similar to that given by Morris "*a behaviour by a public official that deviates from public interest*" (1991) or the definition from the World Bank, a leading international body that studies the issue, and which defines corruption as "*the abuse of public*

office for private gain" (World Bank, 1997: 8). Thus, corruption is usually defined as the misuse of public power for private benefit (Lambsdorff, 2007). We need to be careful, however, for there is a certain degree of discord with regard to the definition. Some researchers, for example, have studied corruption between private firms (not corruption involving public office), but this is not our focus. Other researchers have taken a wider stance in their perspective of corruption (Ashforth, Gioia, Robinson, & Travino, 2008). Instead of "*abuse of private office*" as in the World Bank definition, they substitute the word "*authority*" (Rodriguez, Siegel, Hillman, & Eden, 2006) thereby including various types of corruption. In this paper, we have adopted the more limited, but relatively common definition of corruption (Shleifer & Vishny, 1993; Jain, 1998).

Relying on neo-institutional literature, this paper focuses on the influence of organizational isomorphism on corruption in emerging countries. Our aim is to examine the institutional reasons for corruption using a model based on empirical research in emerging countries. A questionnaire was administrated in person to top executives from firms across various economic sectors in emerging countries.

The paper is motivated by the social and economic importance of corruption. Corruption is a major ethical social issue for any country. Furthermore, since studies have correlated an increase in corruption with economic decline (Mauro, 1995; Rose-Ackerman, 2002), the topic is also economically relevant. The paper includes various research contributions. Firstly, the study is based on direct data collection, which is currently lacking in research on corruption. This is understandable in view of the hidden nature of the phenomenon. Most research on corruption relies on macroeconomic data, specifically based on a broad evaluation of the issue by organizations such as Transparency International. This paper is based on a large-scale empirical survey conducted in 26 emerging countries. Another added-value of this paper is our use of the organisational isomorphism model to study corruption. In particular, we developed the hypothesis that corruption by any firm is influenced by the magnitude of unfair behaviour adopted by its competitors. A major contribution of this paper is our finding that corruption is largely explained by the mimetism of peers. Practically speaking, a firm may decide to use corruption when its competitors adopt unfair behaviour. We also explain corruption by coercive and competitive isomorphism.

The first section of the paper is a literature review concerning corruption and organizational isomorphism in the context of emerging countries. The main findings from the theoretical literature review led us to empirical research building. The second section addresses the empirical research conducted and the methods adopted. The paper progresses to an examination of the empirical results, including a description of the results of the structural equation model. This analysis leads to our conclusion.

THEORETICAL BACKGROUND

For many years, scholars have been working in various fields of social science to connect institutions with the structure and behaviour of organizations. The new institutionalism has tried to provide fresh answers to old questions about how social choices are shaped, mediated, and channeled by institutional arrangements (Powell & DiMaggio, 1991). In this perspective, some key work was conducted by DiMaggio and Powell who introduced the idea of organizational isomorphism to understand similarities in firms (1983). Isomorphism is a *"constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions."*

The process of isomorphism concerns various types of behaviours, including corruption. The study of organizational isomorphism is a key to understanding an organizational decision to adopt corrupt practices. Hence, in the next section, we discuss the various types of isomorphism which underpin our diverse hypotheses.

Competitive isomorphism is the pressure to adopt behaviour similar to that of the competition (Hannan & Freeman, 1977; Aldrich, 1979). The link between competition and corruption has been studied by various authors including Goldsmith (1999) who argued that corruption is negatively correlated with different indicators of economic freedom. However, Ades and DiTella stated that, in theory, the effect of competition on corruption is ambiguous (1999). Lambsdorff (2007) also argued that economic liberalization does not immediately reduce corruption. Using the number of years a country has been open to trade as a proxy for competition, Sachs and Warner showed that, in many cases, economic reform paid off after a few years in terms of accelerated growth of GDP (1995). Their research suggests that the increase in competition may not reduce corruption immediately. Other empirical results show that the number of years of open trade (proxy for competition) is negatively correlated to corruption (Leite & Weidemann, 1999; Treisman, 2000). Therefore the first effect of competition may be an increase in corruption (Tavares, 2007; Venard, 2008). For example, an executive may have been given high-level targets by his/her hierarchy, and when confronted with intense competition, he or she may use corruption to achieve the required results (Clinard, 1983). Many emerging countries have been characterized by lack of competition. Therefore, in the first stage of economic liberalization processes, firms in emerging countries may try to secure rents from or with corrupt government officials.

In its second phase, increased competition will lead to a decline in corruption. Given the scope of the research concerning emerging countries new to competition (Sachs & Warner, 1995), the competitive isomorphism perspective leads to our first hypothesis **H1**: '*A positive relationship exists between the intensity of competition between firms and the level of corruption.*'

Figure 1. Hypothesized model explaining the level of corruption in firms in emerging countries.
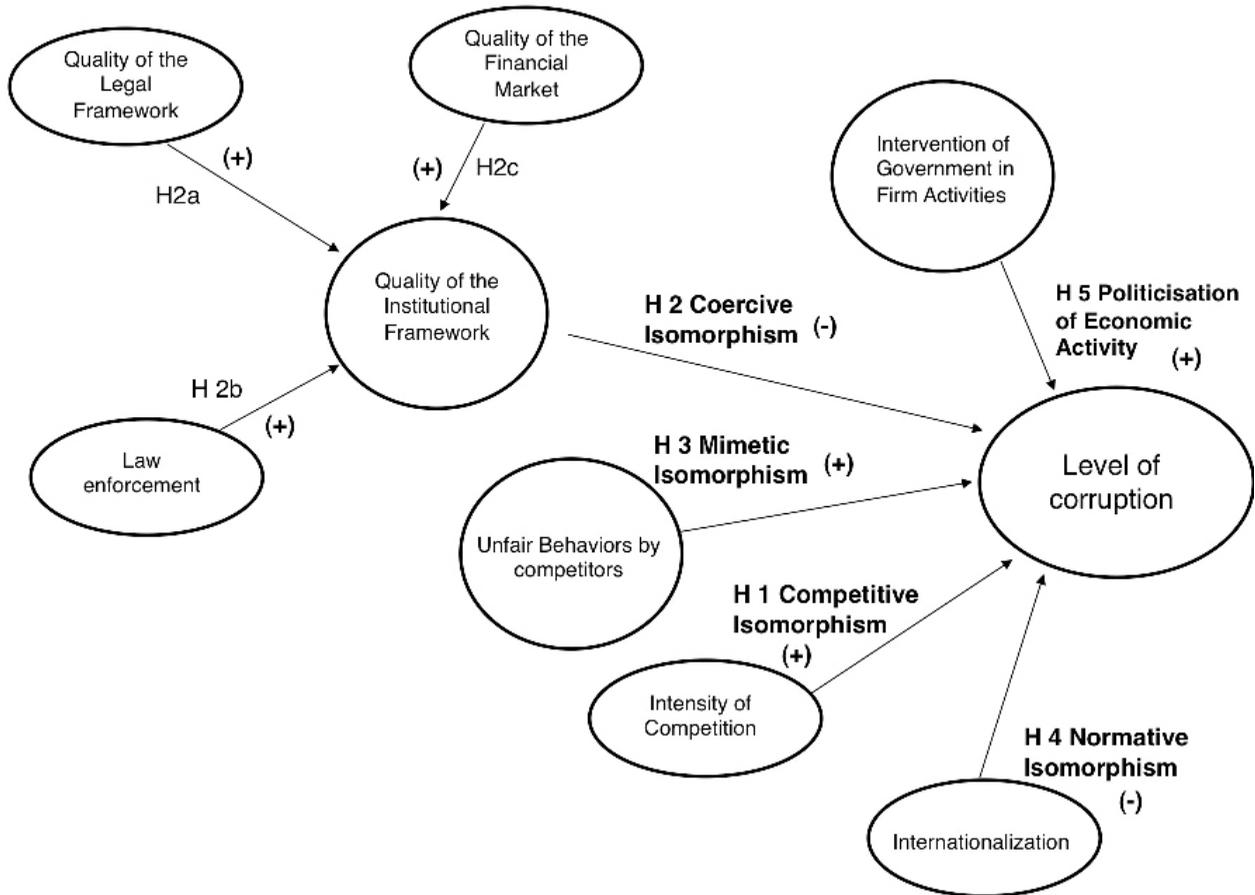
Institutional isomorphism is the similarity among firms resulting from the institutional environment. The institutional environment is the set of key external institutions that constrain any organization to adopt an organizational form. Hawley proposed the principle of isomorphism, in which the similarity between organizations reflects the similarity of their environments and variation in organizational forms reflects the diversity of environments (1950, 1968). The key issue is to determine the fundamental mechanisms through which isomorphic change occurs. DiMaggio and Powell identified three mechanisms: coercive, mimetic, and normative (1983, 1991).

Coercive isomorphism is the homogenization of organizations caused by the pressure exercised on a given organization by other organizations. An example of a powerful organization is the state (Scott, 1995), since firms are influenced by rules institutionalized and legitimized by the state (Meyer & Rowan, 1977). The state defines institutional frameworks that influence organizations by establishing rules, inspecting the conformity of firms, and handing out rewards or punishments (Scott, 1995: 35).

Many scholars and international agencies have noted an institutional impact on corruption. Studies have shown that it is necessary to build appropriate regulative institutions to reduce corruption (World Bank, 1997, 2000). For example, based on empirical research, Dreher, Kotsogiannis and McCorriston showed that the higher the institutional quality, the lower the use of corruption (2005). Therefore, to fight corruption, the European Bank for Reconstruction and Development (EBRD), the World Bank, the United Nations, and the Organisation for Economic Co-operation and Development (OECD) proposed improving the quality of institutional frameworks.

The question is therefore to define the quality of a given institutional framework. In this paper, we define the strength of an institutional framework through the strength of variables, including the quality of the legal framework, the quality of law enforcement, and the quality of the financial markets (each variable is clarified separately hereafter).

Firstly, the legal framework is an important variable in the analysis of institutional systems (Scott, 1995). As stated by DiMaggio and Powell, "the existence of a common legal environment affects many aspects of an organization's behaviour and structure" (1983). One example of regulation is the *"Convention on Combating Bribery of Foreign Public Officials in International Business Transactions,"* promulgated in 1997 (OECD, 2007). The OECD Anti-Bribery Convention requires countries to impose tough sanctions – including fines and imprisonment – for bribery of foreign public officials, also referred to as "foreign bribery." The laws are norms that are drawn up to guide the actions of all economic actors within an institutional framework. Laws that define the forbidden, such as corruption, and also constrain these behaviours with negative incentives (such as punishments) are set out to deter non-appropriate action. Laws are crucial not only for the protection of contracts and private property, but also to limit the ability of officials to prey on private property and solicit bribes. A strong legal environment is greatly needed by emerging countries to fight corruption (Rodriguez & Ehrichs, 2007). In a study of 61 countries, Kimbro noted the impact of the quality of legal systems on corruption (2002). Thus, governments seeking to fight corruption need to strengthen the laws that punish corruption (Rodriguez et al. 2007).

Secondly, while laws are important, they are useless without enforcement. North (1990) emphasized the importance of efficient legal systems to enforce contracts, a determinant for economic growth. Thus, the ability of governments to enforce laws is crucial in assessing the quality of an institutional environment, especially in its ability to influence corruption. The legal framework not only refers to laws but also includes the creation of regulatory institutions that monitor competition, securities markets, banking, trade, patents and other economic sectors that require business law enforcement (Shleifer & Vishny, 1998). To explain the effect of law enforcement on corruption, we should consider the scenario in which a country has enacted anti-corruption regulations, but lacks complete application of these laws. In such cases, the laws are rendered useless in fighting corruption. Thus, experts recommend that to ensure anti-corruption laws are ef-

fectively enforced, the enforcement process must be monitored (Rodri-guez et al., 2007: 310). Various strategies to reduce corruption are thus connected, such as anti-corruption laws which must incorporate strong law enforcement policies (Pope, 2000).

Thirdly, the financial system is also an important aspect of the insti-tutional environment (Zysman, 1983; Szego, 1993). Whitley (1999) suggested that the assessment of an institutional framework should be partly based on an evaluation of the quality of the financial markets. Thus, it is possible to differentiate between various countries when ana-lysing the characteristics of their different types of financial institutions (Cox, 1986). Some studies have shown the link between the quality of the financial market and the level of corruption, concluding that low in-ternational financial integration (the degree to which an economy does not restrain cross-border financial transactions) is positively correlated to an increase in corruption (Edison et al., 2002). Rivera-Batiz also showed that countries with widespread corruption suffer from low rates of return on capital before the liberalization of international financial transactions (2001). Of course, the quality of financial markets depends on various dimensions. The critical criteria for evaluating a financial market focus on the processes by which capital is more or less easily available (Whitley, 1999: 49; Venard & Hanafi, 2008). If capital is easier to procure, it is also easier for firms to finance their activities and so investing in a new economic project such as product development or the creation of a foreign subsidiary will be easier to fund. In this paper, the quality of a given financial market is thus an evaluation of its various key components, which implies that capital is easy for firms to access.

In view of the preceding discussion, our hypothesis is that the higher the quality of the institutional environments (quality of law, law enforce-ment and financial markets), the lower the level of corruption.

Our hypothesis is therefore **H2** "*A negative relationship exists between the quality of the institutional environment and the level of corruption.*"

Furthermore, our definition of the quality of the institutional environment leads to the following hypotheses:

> **H2a** "A positive relationship exists between the quality of the legal framework and the quality of the institutional environment."

> **H2b** "A positive relationship exists between the quality of law enforcement and the quality of the institutional environment."

> **H2c** "A positive relationship exists between the quality of the financial market and the quality of the institutional environment."

Another important mechanism of institutional isomorphism is mimetism. Mimetic isomorphism is often analyzed as a key factor of homogeni-zation in the institutional literature (Mizruchi & Fein, 1999). Mimetism is defined as copying actions of business peers (DiMaggio & Powell, 1983). A firm's decision to adopt corrupt behaviour could therefore be linked to its competitor's behaviour (Venard & Hanafi, 2008). Corruption is not only an individual action, but is also a social action influenced by the behaviour of other social actors. Rose-Ackerman noted that mem-bership to a reference group implies mimetism with regard to corruption (2002). The reference group for an organization is a group of firms in

the same market sector and a participant in the reference group might imitate the corrupt behaviour of the other members. Thus, if firms in an economic sector adopt a large degree of unfair behaviour (not only corrupt behaviour), a specific enterprise in the same sector will certainly imitate this behaviour and will use corruption as a means to achieve its financial objectives. We define unfair behaviour in this paper as the likelihood of firms to be dishonest. An firm using unfair behaviour is one that does not respect local regulations, such as paying government taxes, or which fails to observe or follow trade regulation. If many firms within the same economic sector practice unfair behaviour, they will have a competitive advantage over any given 'honest' firm. For example, failure to pay taxes will reduce the 'unfair' firm's costs. To preserve its economic rents, the reaction of the 'honest' firm may be to imitate the behaviour of its reference group. Our second hypothesis is therefore **H3**: "*A positive relationship exists between unfair behaviour by competitors and the level of corruption.*"

Finally, the last institutional isomorphism concept is normative isomorphism, which refers to the fact that organizations are influenced by rules that introduce a prescriptive, evaluative, and obligatory dimension into social life (Scott, 1995: 37). Societal norms may be introduced in various ways. For example, March and Olsen noted that much of an organization's behaviour is governed by organizational processes such as strategies, objectives, and conventions (1989). In this article, we will analyse a particular example of normative isomorphism in which norms were introduce by the headquarters of multinationals for its subsidiaries. Thus, a local subsidiary of a multinational will face considerable pressure to respect the various norms adopted by the multinational's headquarters. For example, the top management of a multinational could issue various recommendations and internal procedures, which become internal norms shared by the group's various entities. The question then becomes what influence this normative isomorphism has on the potential for corruption. It is recognized that developed countries have a much lower level of corruption than emerging countries (Mauro, 1995). Transparency International has documented the lowest levels of corruption in the richest countries (Rodriguez et al., 2007). Furthermore, the OECD "*Convention on Combating Bribery of Foreign Public Officials in International Business Transactions*" recommends that countries impose tough sanctions – including fines and imprisonment – on their multinationals for bribery of foreign public officials. Most multinationals are headquartered in developed countries (this trend is changing but was not prevalent at the time of our survey). Therefore, we might expect that if multinationals in developed countries invest in enterprises within emerging countries, then the multinationals will extend their ethical norms to their subsidiaries and will seek to reduce corrupt practices. The importance of ethical norms transmitted by multinationals to their subsidiaries will be correlated with the importance of the foreign financial stake within the capital of the subsidiary. The greater the financial participation of the multinational in its subsidiary, the greater the normative isomorphism should be and thus, the lesser the chance of corruption in the subsidiary. Our next hypothesis **H4** is

therefore: "*A negative relationship exists between foreign financial participation in local firms in emerging countries and the level of corruption in firms.*"

At macroeconomic level, government intervention is crucial in building appropriate business systems (Whitley, 1999). Key institutions need to be created via state intervention. The construction of a legal framework is a sufficient example to emphasize the need for state intervention. In the invisible hand model, the government restricts itself to providing public goods, such as regulations and law enforcement, and leaves most allocation decisions to the private sector (Frye & Shleifer, 1997).

At microeconomic level, however, governments can be interventionist but also unorganized, and thus may have a larger number of bureaucrats pursuing personal agendas, including taking bribes (Shleifer & Vishny, 1993). A number of authors have described the phenomena of the politicisation of economic activity (Johnson, Kaufman, & Zoido-Lobaton, 1998). Politicisation of an economic activity describes the exercise of control rights over firms by politicians and bureaucrats (Johnson et al., 1998). Government interventions designed to correct market failures require the use of different bureaucrats to make decisions, but also may create opportunities for politicians and civil servants to adopt corrupt behaviour and demand bribes (Acemoglu & Verdier, 2000: 95). When politicians and civil servants have some residual control rights over firms, they may use this power to serve their private interests and ask for bribes. Practically speaking, when a politician has some power over a private firm, he/she may use this power to develop corruption to his/her benefit. From the point of view of a private firm, its key executives may feel that they lack the required state protection, and some politicians may use this lack of protection to gain power over the private firm. In this case, the executives may develop corrupt relations with public officials to protect their property (Sonin, 2003). Thus, there is a major difference between a government's influence in implementing a 'friendly' business environment (notably with an adequate legal framework and law enforcement base) and the intervention of a government in the functioning of private firms. On a macroeconomic level, political intervention leads to the transformation of an institutional context. The government restricts itself to providing public goods (Frye & Shleifer, 1997), and this leads to a decline in corruption. At microeconomic level, however, the government could interfere in the decisions of private firms, creating opportunities for corruption. Thus, government intervention in the operations of private firms could lead to a certain amount of corruption (Acemoglu & Verdier, 2000). Our last hypothesis is therefore:

H5 "*In emerging countries, a positive relationship exists between the level of politicisation of economic activity and the level of corruption.*"

METHODS

Sample

To test our theoretical model, a method of direct data collection through face-to-face interviews was used. The sample was composed of 4104 firms in 26 countries. The survey was conducted as part of the EBRD (European Bank for Reconstruction and Development) and World Bank Business Environment and Enterprise Performance Survey. The population of business organisations was studied in each country in order to obtain a breakdown of private sector firms. This was necessary in order to conduct the survey using a quota method. **Table 1** and **2** describe various elements of the sample. The sample was built via the quota method using three criteria: industry category, number of employees, and location. The final sample was similar to the three criteria of the population of private firms in the different countries. Accurate sampling of organisations was crucial in order to ensure that the research findings were representative.

Data collection

Interviews were conducted with managers or owners of firms through site visits in 26 countries from June 1998 through to August 1998. Since our research focused on the link between organizational isomorphism and corruption, the period of time is not crucial. Our objective was to test theoretical hypotheses concerning corruption in various national contexts and not to describe corruption in emerging countries at the end of the 1990s. The respondents were 30% company owners, 17% chief executive officers/company presidents, 24% directors and 14% financial officers/accountants. The remaining (15%) had other managerial positions. Different interviewers were used in the various countries. **Table 1** gives the list of countries and the number of interviews per country. The diversity of the 26 countries allowed us to test our hypotheses in various national contexts. A test questionnaire was administered via five interviews in each country. After the questionnaires were completed, the companies were contacted by phone to ensure that the firm matched the relevant quota criteria and to arrange an appointment with the prospective respondent. Interviews were conducted face-to-face using the specially designed questionnaire to assess the level of corruption. The questionnaire was translated into various languages. Most interviews lasted between one and two hours. The questionnaire was divided into two parts. The first part concerned the description of both the firm and the respondent. The second part contained 70 questions to assess various aspects of the business environment, the importance of corruption, and various elements concerning corruption experiences and practices (See **Appendix 1** for the questionnaire). The interviews were carried out in the respondents' offices by trained interviewers. One in six interviews was audited by a phone call to the respondent to check that the interview was conducted properly. Some questions were repeated to ensure accuracy.

Table 1. List of countries involved in the empirical research and number of questionnaires per country.

Country	Number of questionnaires	% of questionnaires
Albania	163	4
Armenia	125	3
Azerbaijan	137	3.3
Belarus	132	3.2
Bosnia	127	3.1
Bulgaria	130	3.2
Croatia	127	3.1
Czech Republic	149	3.6
Estonia	132	3.2
Georgia	129	3.1
Hungary	147	3.6
Kazakhstan	147	3.6
Kyrgyzstan	132	3.2
Latvia	166	4.0
Lithuania	112	2.7
Macedonia	136	3.3
Moldova	139	3.4
Poland	246	6.0
Rep Serpska	65	1.6
Romania	125	3.0
Russia	552	13.5
Slovakia	138	3.4
Slovenia	125	3.0
Turkey	150	3.7
Ukraine	247	6.0
Uzbekistan	126	3.1
TOTAL	4104	100.0

Table 2. Description of the sample according to the sampling criteria.

Description of the sample	Number of respondents	% of questionnaires
Capital city	1248	30
Other towns with over 1 million inhabitants	244	6
Between 250,000 and 1,000,000 inhabitants	524	13
Between 50,000 and 249,999 inhabitants	780	19
Below 50,000 inhabitants	1308	32
Total	4104	100%
Very small firms (fewer than 9 employees)	1100	27
Small firms (10-49)	905	22
Medium firms (50-199 employees)	1171	29
Large firms (200+ employees)	928	23
Total	4104	100%
Agriculture, Farming, Fishing, Forestry	456	11
Mining, Quarrying, Energy	56	1
Manufacturing	1249	30
Building, Construction	376	9
Trade, wholesale	566	14
Retail	577	14
Transport (air, land, sea)	240	6
Financial services	70	2
Personal services: health, welfare, education and others	230	6
Business services	249	6
Total	4104	100%
Private companies	3470	85
State-owned firms	634	15
Total	4104	100%
Financial stake by a foreign company	513	13
No financial stake by a foreign company	3591	87
Total	4104	100%

Measures

Partial Least Square (PLS) generates statistics to test the reliability and validity of constructs with two or more indicators. As shown in **Table 3,** the indexes had at least a Cronbach's α above 0.77, which is above the suggested reliability level of 0.70 indicated by the literature (Nunnally, 1978). For all the variables (except the internationalization variable), an exploratory factor analysis (EFA) was conducted across all the various items (each item corresponded to a question). For all the variables, we had sufficient convergence to suggest that it was valid to incorporate all of the items into one measure. For each variable, the EFA identified only one dimension. Reliability was also evaluated using the Dillon-Goldstein's rho. A rho superior to 0.6 indicates that the variance of a variable explains at least 60% of the variance of the corresponding measure (Fornell & Larker, 1981). As **Table 3** shows, this was the case for all the variables in our model. In order to assess the scale structure, we performed a confirmatory factor analysis on all the items related to the eight latent variables previously identified and validated by the exploratory factor analyses. All in all, the analysis proved satisfactory, as the Root Mean Square Error of Approximation (RMSEA) was 0.068, a fairly good value with regards to the complexity of the analysis (eight latent variables and 60 measurement variables). In addition, all the loadings had significant parameter estimates (t test >2) and the Joreskog's rhos were all above the 0.7 threshold, hence validating the overall structure of our scales.

The dependent 'corruption' variable was specified in line with our hypotheses as "*a manipulation of powers of government or sale of government property, or both by government officials for personal use*" (Jain, 1998). In studying corruption, it is important to avoid asking whether corruption is inherently good or bad. Johnson pointed out that such questions are futile as the answer depends on the standards of a country and also on the elements of comparison (Johnson, in Ward, 1989: 17). The level of corruption was then evaluated as the frequency of unofficial payments by firms to public officials for garnering various services or other advantages. In order to characterize and measure this variable, a set of seven questions was given to the respondents. For each question, the respondent had to indicate frequency using a 1-6 never/always scale (the same scale was used for all the questions). A sample question is: "How often do firms like yours need to make extra, unofficial payments to public officials to gain government contracts nowadays?" As mentioned earlier, exploratory factor analysis (EFA) across the seven questions indicated sufficient convergence to suggest that it was valid to incorporate all of them into one measure (Cronbach's α = 0.84). The EFA identified only one dimension for this variable.

The same methodology was used for the other variables (see **Table 3**). For example, we evaluated the intensity of competition with a set of six questions. The degree of competition in an industry hinges on five forces: the threat of new entrants, the bargaining power of customers, the bargaining power of suppliers, the threat of substitute products or services (where applicable) and jockeying among current contestants (Porter, 1979, 1980). Therefore, in order to measure the intensity of competition, a set of six statements was given to respondents, using a scale of 1-to-6

(1 for low and 6 for very high) to evaluate the pressure from competitors (this includes new entrants and current contestants, both local and foreign) and the pressure from customers in key strategic decisions, such as "Please rate the influence of the pressure from domestic competitors on key decisions about your business." Exploratory factor analysis (EFA) across the six items indicated sufficient convergence to suggest that it was valid to incorporate all six items into one measure (Cronbach's α = 0.82). The EFA identified only one dimension for this variable.

To evaluate the quality of law enforcement, we used the quality of the public service in general as a proxy. It is difficult to assess the quality of law enforcement if the respondent has never been involved in any legal action. Therefore, we assumed that the stronger the public services, the stronger the capacity of law enforcement. Each top manager was asked a set of questions, including 'Could you please rate the overall quality and efficiency of services delivered by the judiciary/courts?' (See **Appendix 1** for the questionnaire).

Another sample concerned the evaluation of the quality of financial markets. Thus, the higher the quality of a financial market, the more money banks have to lend, making it easier to gain access to foreign banks, and easier to access non-bank equity investors. In turn, bank paperwork decreases, the bureaucracy gets a loan, and so the cycle continues. Our respondents evaluated all the preceding elements. We used six questions to assess the quality of the financial markets such as "Can you tell how problematic bank paperwork and bureaucracy is for the operations and growth of your institution?" The EFA identified again only one dimension with a Cronbach's α = 0.77. Questions for all the variables are provided in **Appendix 1**.

Table 3: Description of variables.

Construct	Hypotheses	Number of items	Mean	S.D.	Cronbach's α	Rho of Dillon-Goldstein
Level of corruption		7	1.6284	1.0864	0.84	0.88
Intensity of competition	H1	6	3.5790	1.6323	0.82	0.87
Quality of the institutional framework	H2	10	3.5968	1.6361	0.81	0.85
Quality of the legal framework	H2a	5	2.9454	1.3993	0.82	0.87
Law enforcement	H2b	11	3.7059	1.2618	0.83	0.87
Quality of the financial market	H2c	6	3.8060	1.7626	0.77	0.85
Unfair behaviour by competitors	H3	9	3.4811	1.7839	0.86	0.89
Internationalization	H4	1	7.3306	22.6415		
Politicisation of economic activity	H5	7	1.8424	1.4553	0.86	0.89

Data Analysis

Our theoretical model was tested using a structural equation modelling technique called Partial Least Squares, PLS (Wold, 1985). The PLS method is oriented toward predictive applications and the explanation of variance as a regression, in which R2 and the significance of relationships among constructs (using Ordinary Least Squares, OLS techniques) indicate how well a model performs (Barclay, Higgins & Thompson, 1995). Conceptually, PLS is "an iterative combination of principal components analysis relating measures to constructs, and a path analysis permitting the construction of a system of constructs" (Barclay et al., 1995: 290). The PLS approach generates estimates of standardized regression coefficients (i.e., path coefficients), which can then be used to assess the relationships between latent variables. PLS also generates factor loadings of the items used, which are interpretable within the context of principal components analysis (Bookstein, 1986). PLS does not make assumptions about (1) data distributions to estimate model parameters, (2) observation independence, or (3) variable metrics (Wold, 1985). These unrestrictive assumptions led us to select PLS over other structural modelling techniques (see Barclay et al., 1995, for a detailed explanation of the PLS technique).

Table 4: Intercorrelations between the various variables.

Variable	Politicisation of economic activity	Unfair behaviour by competitors	Quality of the institutional framework	Intensity of competition	Internationalization	Importance of corruption	Law enforcement	Quality of the financial market	Quality of the legal framework
Politicisation of economic activity	1.0000								
Unfair behaviour by competitors	0.1046	1.0000							
Quality of the institutional framework	-0.0498	-0.4257	1.0000						
Intensity of competition	0.0237	0.2674	-0.1368	1.0000					
Internationalization	-0.0224	-0.0589	0.0831	0.0722	1.0000				
Importance of corruption	0.0811	0.2189	-0.2378	0.1441	0.0481	1.0000			
Law enforcement	-0.0166	-0.1283	0.3592	0.0404	0.0013	-0.2429	1.0000		
Quality of the financial market	-0.0588	-0.3644	0.4671	-0.1826	0.0866	-0.2668	0.2192	1.0000	
Quality of the legal framework	0.0306	-0.0885	0.2816	-0.0116	0.0271	-0.1728	0.3869	0.1694	1.0000

N =4104, All correlations are significant at P < 0.05.

Intercorrelations of all the variables used in this study are provided in **Table 4**. Partial support for our hypotheses can be seen in the correlation matrix provided. The quality of business systems is positively correlated with both the quality of the legal framework ($r = + 0.28$, $p<0.05$), the quality of law enforcement ($r = + 0.36$, $p<0.05$) and the quality of the financial markets ($r = + 0.47$, $p<0.05$).

As predicted, the intensity of competition also correlated positively with the importance of corruption ($r = + 0.14$, $p<0.05$). Furthermore, the importance of corruption was significantly and negatively correlated with the quality of the business environment ($r = - 0.24$, $p<0.05$). The level of corruption correlated positively with unfair behaviour by competitors ($r = + 0.22$, $p<0.05$) and the politicisation of economic activity also correlated positively with the level of corruption. All these correlations are in line with our theoretical model. However, surprisingly and contrary to our prediction, the importance of the foreign stake in the local subsidiary correlated only slightly positively with the level of corruption ($r = + 0.05$, $p<0.05$).

Table 5 : Results of partial least squares analysis

	Factor	Correlation	Contribution to R2	Path coefficient	T student
Quality of institutional framework	R2	0.3013			
H2a	Quality of the legal framework	0.2816	11.9959	0.1284	10.0481
H2b	Quality of law enforcement	0.3592	26.5241	0.2226	8.47469
H2c	Quality of thr financial market	0.4671	61.4790	0.3966	42.6308
Level of corruption	R2	0.0882			
H1	Intensity of the competition	0.1441	13.3829	0.0819	8.1917
H2	Quality of the institutional framework	-0.2378	48.1504	-0.1786	-13.3092
H3	Unfair behaviour by competitors	0.2189	29.4475	0.1186	7.3926
H4	internationalization	0.0481	3.5685	0.0654	5.0073
H5	Politicisation of economic activity	0.0811	5.4507	0.0593	2.9352

The results of the PLS analysis used to test the hypotheses are summarized in **Table 5**. The following results were obtained. Most of our hypotheses were supported by our empirical data. Our first hypothesis 1 concerning competitive isomorphism is supported. We predicted that the higher the intensity of competition, the higher the potential for corruption. The path coefficient between the intensity of competition and the level of corruption was positive and significant ($\beta = 0.14$, $p<.05$). The relationship between the quality of the business environment and the level of corruption was negative and significant ($\beta = - 0.24$, $p<.05$), lending support to Hypothesis 2. Therefore, we support the coercive isomorphism hypothesis. The relationship between the quality of the business environment and the quality of the legal framework was positive and significant ($\beta = 0.28$, $p<.05$). The relationship between the quality of the business environment and the quality of law enforcement was positive and significant ($\beta = 0.36$, $p<.05$). The relationship between the quality of the business environment and the quality of the financial market was also positive and significant ($\beta = 0.47$, $p<.05$). These results support our hypotheses H2a, H2b and H2c. The relationship between the level of unfair behaviour by competitors and the level of corruption was positive and significant ($\beta = 0.22$, $p<.05$). Our data supports Hypothesis 3 concerning mimetic isomorphism. Furthermore, the relationship between the level of internationalisation and the level of corruption was only slightly positive ($\beta = 0.05$, $p<.05$) and the contribution to R^2 was very limited at 3.57%. Therefore, we must reject hypothesis H4 concerning normative isomorphism. Finally, we also have to reject hypothesis H5 concerning the link between the politicisation of the economic activity and the level of corruption as our data shows a positive but marginal relationship between these aspects ($\beta = + 0.08$ $p<.05$) and a very limited contribution to the R^2 at 5.45%. Our model explaining the quality of the business environment is significant, with an R^2 of 0.3109 (See **Table 3**). The combination of variables predicts 30% of the variance concerning the quality of the business environment. Overall, the basic model shown in **Figure 1** and tested using PLS supports six of the hypotheses in this study with an R^2 of 0.08.

Our model gives a stimulating explanation of corruption with respect to environmental and organizational factors. First, we predicted that an increase in competition in emerging countries is likely to lead to an increase in corrupt behaviour. We ascertained a positive relationship between the intensity of competition and the level of corruption. Competitive isomorphism on the issue of corruption was supported by our empirical data. Our data shows that the higher the level of competition, the higher the level of corruption. This result can be explained by the fact that in the first stage of economic development, firms in emerging countries facing greater competition may try to increase or secure market shares partially through the use of corruption. An increase in competition leads firms in emerging countries to protect rents through corruption.

Second, the coercive isomorphism hypothesis was also supported by our data: i.e., the higher the quality of a business system, the lower the level of corruption. Indeed, as firms are dependent on the regu-

lative institutional environment, they adopt structures and behaviours accordingly. The quality of the business system (notably the quality of the legal framework, the quality of law enforcement and the quality of financial markets) influences the level of corruption in firms in emerging countries.

Third, mimetic isomorphism explains the potential level of corruption. If the competitors of a firm have high levels of unfair practice, a firm is more likely to adopt corrupt behaviour. This is in line with the theory of the reference-group's influence on corruption (Rose-Ackerman, 2002), namely that unfair endogenous behaviour exists between enterprises in the same economic sector.

Fourth, the normative isomorphism hypothesis was not supported. Our hypothesis was that the greater the stake of a multinational in a subsidiary, the lower its use of corruption. Our empirical data showed no evidence of this. As a matter of fact, the correlation between the foreign financial participation in the subsidiary and corruption was marginal at 0.05. The effect of multinational investments on the level of corruption is not significant. Furthermore, the contribution to the R^2 is also marginal at less than 4% of the R^2 (3.57%). These results imply independence between both variables. Not all multinationals appear to consistently extend ethical behaviour to their subsidiaries. It is possible that if multinationals face risky investment environments and are confronted by high corruption in emerging countries, they may allow their subsidiaries to engage in corruption. Furthermore, even if a multinational owns a significant stake of the capital in a local firm, it does not stop the local firm from using corruption.

Fifth, our theoretical development leads us to predict that the more politicians and bureaucrats exercise control rights over firms, the more likely organizations are to adopt corrupt behaviour. Despite the politicisation of economic activity and the level corruption being positively correlated, this correlation is marginal with only a minor impact on the overall R^2. We identified independence between both variables. This could be explained by the fact that the politicisation of economic activity creates both corruption opportunities for bureaucrats and also the possibility to control organizations, implying a potential reduction in corruption. In emerging countries, if politicians and bureaucrats exercise control over firms, this may lead to a higher level of corruption but only marginally higher. However, as our model suggests, a total economic free-for-all (i.e. no state economic intervention at all) will not lead to a decline in corruption. Government intervention is necessary to build a correct institutional framework and, in particular, to create an appropriate legal framework and enforce the law.

CONCLUSION

Despite various major reforms led by top international bodies, corruption is still rampant in various emerging countries and this phenomenon undermines their economic development. A weak institutional framework is often described as key factor in the prevalence of corruption. Based on neo-institutional literature, our research aimed to show the influence of organizational isomorphism on corruption in emerging countries. This type of research is difficult because the central concept of corruption is hidden by nature. To explore the issue further, we used a direct data collection method through interviews with executives in emerging countries. A questionnaire was designed with various statements linked to a quantitative scale of answers. This allowed us to use a quantitative methodology to analyze the collected information. We opted for the PLS approach to test our theoretical model. The model developed provides an integrated approach to the study of the relationship between corruption and organizational isomorphism. Our empirical data allowed us to test various theoretical hypotheses.

We tested various key hypotheses concerning the influence of organizational isomorphism on corruption in firms in emerging countries. We showed that the quality of the institutional framework (law, law enforcement, quality of financial markets) has a negative impact on the level of corruption. The 'better' the quality of the institutional environment, the fewer the instances of corruption.

Coercive isomorphism is a key factor in explaining various levels of corruption. There is a need for state intervention in order to build an appropriate business system (law, law enforcement, quality of financial markets). However, intervention should be limited and the state should allow private firms the freedom to make decisions within an adequate institutional framework. The greater the level of state intervention in the decisions of private firms, the more likely the bureaucrats will find opportunities to take bribes.

Furthermore, mimetic isomorphism is a strong argument to explain the extent of corruption. Firms in emerging countries tend to imitate each other's behaviour. A new enterprise in an emerging country is very likely to follow the corrupt behaviour of its successful competitors, for example.

Our empirical data also showed that the greater the level of competition, the greater the degree of corruption and thus firms in emerging countries facing an increase in corruption may try to secure rents by using unethical practices.

The limitations of our study are largely related to our sample population. Despite being conducted in many countries with 4104 interviews, this research relies on one-on-one interviews in each firm, in other words, only one executive was interviewed in each firm, on the assumption that one respondent could describe the phenomenon completely and accurately. This is nonetheless quite common in prior research in the field of corruption (Lancaster & Montinola, 2001).

Our study shows that firms are influenced by the institutional environment in their decisions making regarding corrupt behaviour when dealing with governments. Since human capital that is uncorrupted is the engine of economic development (Wilhelm, 2002), it is important for emerging countries to find ways to reduce levels of corruption. Exploring the impact of corruption on economic development through further studies should be considered a major field priority for economic decision-makers and researchers.

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References

■ Acemoglu, D., & Verdier, T. 2000.
The choice between market failures and corruption. *American Economic Review, 90*(1), 194-211.

■ Ades, A., & Di Tella, R. 1999.
Rents, competition, and corruption. *American Economic Review, 89*(4), 982-993.

■ Aldrich, H. 1979.
Organizations and Environments. Englewood Cliffs, NJ: Prentice-Hall.

■ Aguilera, R. & Vadera, A. 2008. The Dark Side of Authority: Antecedents, Mechanisms, and Outcomes of Organizational Corruption. *Journal of Business Ethics, 77*(4), 431-449.

■ Ashforth, B.E, Gioia, D.A., Robinson, S.L., & Travino, L.K. 2008.
Re-viewing Organizational Corruption. Academy of Management Review, 33(3), 670-684.

■ Barclay, D.W., Higgins, C.A., & Thompson, R.L. 1995.
The Partial Least Square (PLS) approach to causal modeling: personal computer adoption and use as an illustration. *Technology Studies, 2*, 285-309.

■ Bookstein, F. 1986.
The elements of latent variable models: A cautionary lecture. In M. Lamb, A. Brown, & B. Rogoff (Eds.), *Advances in developmental psychology* (pp. 203-230). Hillsdale, NJ: Lawrence Erlbaum Associates.

■ Clinard, M.B. 1983.
Corporate Ethics and Crime. The role of Middle Management. Beverly Hills: Sage.

■ Cox, A. 1986.
State, Finance and Industry. Brighton, UK: Harvester Wheatsheaf.

■ DiMaggio, P.J., & Powell, W.W. 1983.
The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147-160.

■ Dreher, A., Kotsogiannis C., & McCorriston, S. 2005.
How do institutions affect corruption and the shadow economy? Presented at the 2005 European Public Choice Society Conference, Durham, UK, March 31-April 3.

■ Fornell, C., & Larcker, D.F., 1981.
Evaluating structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research, 18*(1), 39-50.

■ Frye, T., & Shleifer, A. 1997.
The invisible hand and the grabbing hand. *American Economic Review, 87*(2), 354-358.

■ Goldsmith, A. 1999.
Slapping the Grabbing Hand: correlates of Political Corruption in Emerging Countries. *The American Journal of Economics and Sociology, 58*(4), 866-883.

■ Hawley, A.H. 1950.
Human Ecology. New York: Ronald Press.

■ Hawley, A.H. 1968.
Human Ecology. In D.L. Sills (Ed.), *International encyclopaedia of the social sciences* (pp. 328-337). New York: MacMillan.

■ Hannan, M.T., & Freeman, J. 1977.
The population ecology of organizations. *American Journal of Sociology, 82*(5), 929-964.

■ Jain, A.K. (Ed.) 1998.
Economics of Corruption. Dordrecht: Kluwer.

■ Johnson. S., Kaufmann, D., & Zoido-Lobaton, P. 1998.
Government in Transition. Regulatory Discretion and the Unofficial Economy. *American Economic Review, 88*(2), 387-392.

■ Kimbro, M. 2002.
A cross-country empirical investigation of corruption and its relationship to economic, cultural, and monitoring institutions: An examination of the role of accounting and financial statements quality. *Journal of Accounting, Auditing and Finance, 17*(4), 325-349.

■ Lambsdorff, J. 2007,
The Institutional Economics of Corruption and Reform. Cambridge: *Cambridge University Press.*

■ Lancaster, T.D., & Montinola, G.R. 2001.
Comparative political corruption: Issues of operationalization and measurement. *Studies in Comparative International Development, 36*(3), 3-28.

■ Leite, C., & Weidemann, J. 1999. Does Mother Nature Corrupt? Natural Resources, Corruption and Economic Growth. *International Monetary Fund Working Paper* 99/85, July.

■ March, J., & Olsen, J. 1989.
Rediscovering institutions: The organizational basis of politics. New York: Free Press.

- Mauro, P. 1995.
Corruption and growth. *Quarterly Journal of Economics, 110*(3), 681-712.

- Meyer, J.W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(1), 340-363.

- Mizruchi, M., & Fein, L. 1999. The Social construction of organizational knowledge: A study of the uses of coercive, mimetic and normative isomorphism. *Administrative Science Quarterly, 44*(4), 653-683.

- Morris, S.D. 1991.
Corruption and politics in contemporary Mexico, Tuscaloosa, AL: *University of Alabama Press.*

- North, D.C. 1990.
Institutions, institutional change and economic performance. Cambridge: *Cambridge University Press.*

- Nunnally, J.C. 1978.
Psychometric Theory. New York: McGraw-Hill.

- OECD, 2007.
OECD Working Group on Bribery Annual Report. Paris: OECD.

- Pope, J. 2000.
Confronting Corruption. The Elements of a National Integrity System. Germany: *Transparency International.*

- Porter, M. 1979.
How competitive forces shape strategy. *Harvard Business Review, 57*(2), 137-145.

- Porter, M. 1980.
Competitive strategy. New York: Free Press.

- Powell, W.W., & DiMaggio, P.J. 1991.
The New Institutionalism in Organizational Analysis. Chicago: *University of Chicago Press.*

- Rivera-Batiz, F. 2001.
International financial liberalization, corruption and economic growth. *Review of International Economics, 9*(4), 727-737.

- Rodriguez, D., & Ehrichs, L. 2007.
Global Corruption Report, 2007. Corruption in Judicial Systems. Cambridge: *Cambridge University Press & Transparency International.*

- Rodriguez, P., Siegel, D.S., Hillman, A., & Eden, L. 2006.
Three lenses on the multinational enterprise: politics, corruption, and corporate social responsibility. *Journal of International Business Studies, 37,* 733-746.

- Rose-Ackerman, S. 1978.
Corruption. A study in political economy. New York: *Academic Press.*

- Rose-Ackerman, S. 1999.
Corruption and government. Causes, consequences, and reform. Cambridge: *Cambridge University Press.*

- Rose-Ackerman, S. 2002.
Grand corruption and the ethics of global business. *Journal of Banking and Finance, 26*(9), 1889-1918.

- Sachs, J.D., & Warner, A., 1995.
Economic Reform and the Process of Global Integration. *Brookings Papers on Economic Activity, 25*(1), 1-118.

- Scott, R. 1995.
Institutions and organizations. *Thousand Oaks,* CA: Sage.

- Shleifer, A., & Vishny, R.W. 1993.
Corruption. *Quarterly Journal of Economics, 108*(3), 599-617.

- Shleifer, A., & Vishny, R. 1998. The grabbing hand: Government pathologies and their cures. Cambridge, MA: *Harvard University Press.*

- Sonin, K. 2003.
Why the rich may favor poor protection of property rights. *Journal of Comparative Economics, 31*(4), 715-731.

- Szego, G. 1993.
Introduction on banks and capital markets in former planned countries. Their role in establishing a market economy. *Journal of Banking and Finance, 17*(5), 773-783.

- Tavares, S.C. 2007.
Do Rapid Political and Trade Liberalizations Increase Corruption? *European Journal of Political Economy,* 23(4), 1053-1076.

- Treisman, D. 2000.
The Causes of Corruption: A Cross-National Study. *Journal of Public Economics,* 76, 399-457.

- United Nations, 2002.
Global Dynamics of Corruption. Vienna: United Nations Development Programme.

▪ United Nations, 2008.
Tackling Corruption, Transforming Lives. India: United Nations Development Programme & MacMillan.

▪ Venard, B., & Hanafi, M. 2008. Organizational Isomorphism and Corruption in Financial Institutions: Empirical Research in Emerging Countries. *Journal of Business Ethics, 81*, 481–498.

▪ Venard. B. 2008.
Organizational Isomorphism and Corruption: An Empirical Research in Russia. *Journal of Business Ethics,* (online first article)

▪ Ward, P. 1989.
Corruption Development and Inequality. Soft Touch or Hard Graft? London: Routledge.

▪ Wilhelm, P. 2002.
International validation of the corruption perceptions index: Implications for business ethics and entrepreneurship education. *Journal of business Ethics, 35*(3), 177-189.

▪ Whitley, R. 1994.
Dominant forms of economic organization in market economies. *Organization Studies, 15*(2), 153-182.

▪ Whitley, R. 1999.
Divergent capitalisms: The social structuring and change of business systems? Oxford: *Oxford University Press.*

▪ Wold, H. 1985.
System Analysis by partial least square. In P. Nijkamp, H. Leitner, & N. Wrigley (Eds.) *Measuring the immeasurable* (pp. 221-252). Dordrecht: Martinus Nijhoff.

▪ World Bank, 1997.
Helping countries combat corruption. *Poverty Reduction and Economic Management Unit,* Report, June.

▪ World Bank, 2000.
Reforming public institutions and strengthening governance. Public Sector Group, *Poverty Reduction and Economic Management Network,* Report, November.

▪ Zysman, J. 1983.
Governments, markets and growth: Financial systems and the politics of industrial change. Ithaca, NY: *Cornell University Press.*

Appendix 1. Questionnaire

Concept : Level of corruption

- How often do firms like yours need to make extra, unofficial payments to public officials to get connected to public services nowadays?
- How often do firms like yours need to make extra, unofficial payments to public officials to get licences and permits nowadays?
- How often do firms like yours need to make extra, unofficial payments to public officials to deal with taxes and tax collection nowadays?
- How often do firms like yours need to make extra, unofficial payments to public officials to gain government contracts nowadays?
- How often do firms like yours need to make extra, unofficial payments to public officials when dealing with customs / imports nowadays?
- How often do firms like yours need to make extra, unofficial payments to public officials when dealing with courts nowadays?
- How often do firms like yours need to make extra, unofficial payments to public officials to influence the content of new laws, decrees or regulations nowadays?

H1 Intensity of competition

- Please rate the influence of the pressure from domestic competitors on key decisions about your business with respect to "developing new products and markets."
- Please rate the influence of the pressure from foreign competitors on key decisions about your business with respect to "developing new products and markets."
- Please rate the influence of the pressure from customers on key decisions about your business with respect to "developing new products and markets."
- Please rate the influence of the pressure from domestic competitors on key decisions about your business with respect to "reducing the production costs of existing products."
- Please rate the influence of the pressure from foreign competitors on key decisions about your business with respect to "reducing the production costs of existing products."
- Please rate the influence of the pressure from customers on key decisions about your business with respect to "reducing the production costs of existing products."

H2 Quality of the institutional framework (1)

- Can you tell me how problematic financing is for the operations and growth of your business?
- Can you tell me how problematic infrastructures are (e.g. telephone, electricity, water, roads, land) for the operations and growth of your business?

- Can you tell me how problematic taxes and regulations are for the operations and growth of your business?
- Can you tell me how problematic policy instability / uncertainty is for the operations and growth of your business?
- Can you tell me how problematic inflation is for the operations and growth of your business?
- Can you tell me how problematic exchange rates are for the operations and growth of your business?
- Can you tell me how problematic the functioning of the judiciary is for the operations and growth of your business?
- Can you tell me how problematic street crime, theft and public disorder are for the operations and growth of your business?
- Can you tell me how problematic organized crime and the mafia are for the operations and growth of your business?
- Can you tell me how problematic anti-competitive practices by government or private enterprises are?

H2a Quality of the legal framework

- Thinking about our country's legal system, how often do you associate the following descriptions "Fair and impartial" with the court system in resolving business disputes?
- Thinking about our country's legal system, how often do you associate the following descriptions "honest/uncorrupted" with the court system in resolving business disputes?
- Thinking about our country's legal system, how often do you associate the following descriptions "Quick" with the court system in resolving business disputes?
- Thinking about our country's legal system, how often do you associate the following descriptions "Affordable" with the court system in resolving business disputes?
- Thinking about our country's legal system, how often do you associate the following descriptions "Consistent/reliable" with the court system in resolving business disputes?

H2b Law enforcement (evaluated by the quality of public service)

- Could you please rate the overall quality and efficiency of services delivered by the customs service?
- Could you please rate the overall quality and efficiency of services delivered by the judiciary / courts?
- Could you please rate the overall quality and efficiency of services delivered by the roads department?
- Could you please rate the overall quality and efficiency of services delivered by the postal agency?
- Could you please rate the overall quality and efficiency of services delivered by the telephone service?
- Could you please rate the overall quality and efficiency of services delivered by the electric power company?

- Could you please rate the overall quality and efficiency of services delivered by the water/sewerage agency?
- Could you please rate the overall quality and efficiency of services delivered by the public health care service?
- Could you please rate the overall quality and efficiency of services delivered by the education services?
- Could you please rate the overall quality and efficiency of services delivered by the police?
- Could you please rate the overall quality and efficiency of services delivered by the armed forces/military?

H2c Quality of the financial market

- Can you tell me how problematic bank paperwork and bureaucracy are for the operations and growth of your institution?
- Can you tell me how problematic high interest rates are for the operations and growth of your institution?
- Can you tell me how problematic the need for special connections with banks and financial institutions is for the operations and growth of your institution?
- Can you tell me how problematic the lack of access to long-term bank loans is for the operations and growth of your institution?
- Can you tell me how problematic the lack of access to Foreign banks is for the operations and growth of your institution?
- Can you tell me how problematic the lack of access to non bank equity/investors/partners is for the operations and growth of your institution?

H3 Unfair behaviour by competitors

- Can you tell me how serious a problem the following practices of your competitors are for your firm? They avoid sales tax or tax on profits.
- Can you tell me how serious a problem the following practices of your competitors are for your firm? They do not pay duties or observe trade regulations.
- Can you tell me how serious a problem the following practices of your competitors are for your firm? Foreign producers sell below international prices.
- Can you tell me how serious a problem the following practices of your competitors are for your firm? Domestic producers unfairly sell below prices.
- Can you tell me how serious a problem the following practices of your competitors are for your firm? They avoid labour taxes / regulations
- Can you tell me how serious a problem the following practices of your competitors are for your firm? They violate my copyrights, patents or trademarks.
- Can you tell me how serious a problem the following practices of your competitors are for your firm? They collude to limit my access to credit, supplies, land, equipment or customers.
- Can you tell me how serious a problem the following practices of your competitors are for your firm? They receive subsidies (including the toleration of tax arrears) from national / local government.

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- Can you tell me how serious a problem the following practices of your competitors are for your firm? They have preferential access to credit, infrastructure services or customers.

H5 Politicisation of economic activity
- How often does the government intervene in the investment decisions made by your firm?
- How often does the government intervene in the employment decisions made by your firm?
- How often does the government intervene in the sales decisions made by your firm?
- How often does the government intervene in the pricing decisions made by your firm?
- How often does the government intervene in the merger/acquisitions decisios made by your firm?
- How often does the government intervene in the dividends decisions made by your firm?
- How often does the government intervene in the wages decisions made by your firm?

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(1) To facilitate interpretation of the results we re-scaled the variable "Quality of the institutional framework" in the following way: (re-scaled answer) = 6 – (original answer). Thus, a higher value corresponds to a higher quality of the institutional framework.