



The relationship between culture and corruption: a cross-national study

Culture and corruption

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Abstract

Purpose – This paper aims to investigate the relationship between the GLOBE (Global Leadership and Organizational Behaviour Effectiveness) project national cultural dimensions of values and practices and the Corruption Perception Index (CPI).

Design/methodology/approach – Most empirical research on culture dimensions and corruption is based on Hofstede's dataset of culture conducted more than 25 years ago. Evidence from a more recent dataset of culture dimensions is needed before current generalizations can be made. The GLOBE project is based on the perceptions of 18,000 individuals.

Findings – The results provide empirical support for the influence of uncertainty avoidance values, human orientation practices, and individual collectivism practices on the level of corruption after controlling for economic and human development, which, in turn, adds to the efforts to build a general theory of the culture perspective of corruption.

Research limitations/implications – The findings offer valuable insights on why cultural values and cultural practices should be distinguished as they relate to corruption.

Practical implications – International policy makers as well as managers at multinational corporations can benefit from the findings of this research study.

Originality/value – The research reported is among the first to investigate the issue of corruption from the perspective of national cultural values and practices.

Keywords Corruption, Culture, Cross-cultural studies

Paper type Research paper

Introduction

Corruption has become one of the forefront managerial issues at the national and international levels. Corrupt practices in international business are widespread and growing (Greenberger, 1995). Economists refer to some indicators that might be influenced by the level of corruption, such as GDP *per capita*, government expenditure, and foreign aid (e.g. Kuton *et al.*, 2007; Ashour, 2006; Svensson, 2005). However, corruption has many consequences, such as the delay of economic development, international trade and investment (Glynn *et al.*, 1997), which negatively impact economic growth (Mauro, 1995). Empirical research shows that the presence of high corruption significantly hinders the inflow of foreign direct investment (FDI) to host countries (Zhao *et al.*, 2003), negatively affects economic success (Mauro, 1998), reduces the level of human capital, and destroys confidence in both public and private institutions (Husted, 2002). Moreover, globalization has increased the need for



managers to predict the potential for country corruption (Davis and Ruhe, 2003; Park, 2003).

Notwithstanding, fighting corruption is very difficult because it is a multifaceted social phenomenon that penetrates horizontally and vertically in many aspects of societies. There are extensive efforts within governmental, non-governmental, and international organizations to fight corruption and to establish specific guidelines to prevent bribery and unethical practices in international business (Getz and Volkema, 2001). Furthermore, dealing with corruption has become an important issue in building the state's institutional capacity (World Bank, 1997). To understand how these organizations can implement this, the antecedents of corruption must be investigated empirically.

Literature review

An initial survey of the literature indicates that there are many antecedents of corruption at the societal level. There is an agreement among various scholars in different fields of research that distinctive societal cultures influence a wide variety of social phenomena (House *et al.*, 2002; Hofstede, 1983). Organizational behaviour studies indicate that values and culture strongly influence personal behaviours (Rokeach, 1972; House *et al.*, 2004; Hofstede, 2001). Cultural dimensions may influence the individual's perception of ethical situations (Scott *et al.*, 1993); therefore, national cultural differences are expected to influence corruption. Understanding cultural dimensions that may influence the level of corruption is critical for a firm's and a country's competitiveness (Davis and Ruhe, 2003) and for conducting international business overseas (Park, 2003). Previous studies have shown that national culture is an important factor that may explain corruption, but this has not been investigated across different countries (Davis and Ruhe, 2003; Park, 2003; Husted, 1999).

Although the importance of the classification system introduced by Hofstede is useful to understand national culture, this paper will investigate the impact of cultural values related to corruption as investigated in the GLOBE project by House *et al.* (2004). This research focuses on the relationship between cultural dimensions in the GLOBE project, which include uncertainty avoidance, power distance, performance orientation, future orientation, assertiveness, institutional collectivism, individual collectivism, and gender egalitarianism and human orientation as independent variables, and corruption as a dependent variable. The present study is an extension of previous empirical studies (Husted, 1999; Davis and Ruhe, 2003; Park, 2003) that have used Hofstede's (1983) culture dataset. Empirical studies that have used Hofstede's measures in explaining different phenomena assume that cultural values are stable and are applicable to present-day ethical situations (e.g. Park, 2003; Davis and Ruhe, 2003; Harris and Davison, 1999; Myers and Tan, 2002; Hasan and Ditsa, 1999). Moreover, Mead (1998) argues that Hofstede's findings are invaluable with regards to applying cultural analysis to practical management problems, even though they were initially reported more than 25 years ago.

This research is an attempt to overcome these concerns by using the GLOBE project data set of cultural dimensions, which is more recent, extensive, and reliable. The purpose of this research is to contribute to the understanding of corruption based on national cultures. Javidan and House (2001) indicate that cross-cultural research can provide insights for senior executives facing global challenges. The implications of this research will benefit international firms, global leaders, and investors in different

countries. The results of this study will aid policy makers and international institutions to understand corruption more deeply. Husted (1999) points out that effective fighting of corruption is dependent on culture. For example, countries with high scores on power distance or high individual collectivism will require different strategies than countries with low scores on these dimensions. It will also provide guidance for international institutions such as the United Nations Development Program and The World Bank in effectively implementing their economic development and governance programs.

Theoretical background

Corruption refers to the dishonest or partial exercise of official functions by the public official (Independent Commission Against Corruption, 1998). Transparency International (2003) defines corruption as the misuse of public power for private benefit. Misuse involves applying illegal and unethical standards. Some researchers define corruption from a behavioural perspective as the abuse of public power for private benefit (Park, 2003; van Klaveren, 1989; Heidenheimer, 1989). Svensson (2005) indicates that corruption can be a response to either beneficial or harmful rules. Corruption appears in response to benevolent rules when individuals pay bribes to avoid penalties for harmful conduct or when monitoring of rules is incomplete. Most considerations of the causes of corruption have been conceptual rather than empirical (Getz and Volkema, 2001). Ashour (2006) classified the underpinning factors of corruption into political infrastructure of state, economic structure, institutional infrastructure, and social/cultural infrastructure. Therefore, corruption is an outcome of a country's political and legal aspects, economic and structural policies, the role of institutions, human development, and globalization. Economists explain corruption in terms of institutional theories that suggest looking at *per capita* income, education, and the role of institutions that restrict market and competition as causes of corruption (Svensson, 2005; Getz and Volkema, 2001; Mauro, 1995). According to the political perspective, scholars point out the form of political institutions, such as:

- parliamentary versus presidential;
- proportional versus majority; and
- the freedom of the press (Svensson, 2005).

Human capital theorists argue that human development and investment in education and human capital cause institutional stability, which is required to assuage corruptive tendencies. For example, Svensson (2005) found that corrupted countries have significantly lower levels of human capital stocks. Moreover, Lambsdorff (1999) reviewed empirical studies regarding corruption and pointed to government involvement, institutional quality, absence of competition, poverty and inequality, policy distortions, political systems, recruitment and salaries, and gender diversity as causes of corruption.

However, studies that address the antecedents of corruption from a cultural perspective are rather limited to Hofstede's classification (Park, 2003; Davis and Ruhe, 2003). Although Hofstede (1991) distinguishes between cultural values and cultural practices, he suggests that national cultural differences consist of differences in values and, to a small extent, to differences in practices. However, House and his colleagues distinguish empirically between cultural values and practices. This paper has adopted

the cultural typology of House *et al.* (2002, 2004) regarding the differences between countries based on the nine dimensions of culture values and practices. House *et al.* (2002) present an integrated framework with nine dimensions for understanding national culture. They borrow three constructs from Hofstede:

- (1) uncertainty avoidance;
- (2) power distance; and
- (3) individual collectivism.

The GLOBE framework modifies the masculinity dimension and develops two new dimensions:

- (1) gender egalitarianism; and
- (2) assertiveness (House *et al.*, 2002).

The framework then adds future orientation, performance orientation, the human orientation dimension and institutional collectivism.

Research hypothesis

Culture is a set of beliefs and values about what is desirable and undesirable in a community of people, and a set of formal and informal practices to support those values (Javidan and House, 2001). Beliefs are people's perceptions of how things are done in their countries (House *et al.*, 2002) and they are the reported practices in a particular culture (House *et al.*, 2002). Values are people's aspirations about the way things should be done; they are their reported preferred practices (House *et al.*, 2002).

Relationship between national culture dimensions and corruption

Uncertainty avoidance and corruption

Uncertainty avoidance is the cultural dimension related to the way that individuals in a society respond to vagueness and uncertain situations (Husted, 2002). Uncertainty avoidance refers to the extent to which a society relies on norms and procedures to cover events and situations in their daily lives. Getz and Volkema (2001) argue that in high uncertainty avoidance cultures, people prefer institutions with well-established norms, rules, policies, and procedures. However, this leads to some conditions that promote corruption (Getz and Volkema, 2001). Moreover, some scholars argue that bureaucratic structures encourage managers to behave unethically. Since social and cultural rules define and limit behaviour, individuals may then perceive that it is necessary to work through informal channels to achieve personal objectives (Getz and Volkema, 2001). This would induce people to offer or pay bribes and similar dishonest dealings, and it might induce officials to demand or accept bribes. Once corrupt patterns are established, they tend to perpetuate because breaking out of the pattern would create uncertainty (Getz and Volkema, 2001). Davis and Ruhe (2003) found a positive and significant correlation between Hofstede's uncertainty avoidance and corruption. Uncertainty avoidance may prevent deviations and unethical behaviours and control over the acts of individuals, which decrease the degree of corruption in a society. Therefore, in a society that has a high level of uncertainty avoidance, people tend to be less corrupt and more concerned about following rules and procedures.

- H1a.* The higher the level of uncertainty avoidance values, the lower the level of corruption.

H1b. The higher the level of uncertainty avoidance practices, the lower the level of corruption.

Future orientation and corruption

Future orientation refers to the extent a culture focuses on the future. Cultural future orientation is the degree to which a society encourages and rewards future-oriented behaviours such as planning (Javidan and House, 2001). High future orientation cultures achieve economic success, have organizations with a longer strategic orientation, have flexible and adaptive organizations and managers, place a higher priority on long-term success, have a strong capability and willingness to imagine future contingencies, formulate future goals, and seek to achieve goals and develop strategies for meeting their future aspirations (Ashkanasy *et al.*, 2004). Conversely, a past-oriented culture might evaluate plans in terms of customs, traditions, or history, but a future-oriented culture would evaluate plans in terms of future benefits (Heals *et al.*, 2004). Cultures with low future orientation or high present orientation show the capability to enjoy the moment, free from past worries or future anxieties, unwilling to plan a sequence to their desired goals and may not appreciate the warning signals that their current behaviour negatively influences (Ashkanasy *et al.*, 2004). The GLOBE project indicates a significantly positive relationship between various economic indicators and the cultural practices of future orientation societies (Ashkanasy *et al.*, 2004). They also show that success in basic science is positively related to future orientation cultural practices, but negatively related to future orientation values (Ashkanasy *et al.*, 2004). These results show that societies may value future orientation to transform their weak capabilities in basic science, but not just to transform their societal and economic conditions (Ashkanasy *et al.*, 2004). Based on this discussion, countries with short time horizons are more focused on immediate actions and decisions; therefore, corrupt practices and acts are more likely to appear in countries that pay little attention to future orientation practices and values.

H2a. The higher the level of future orientation values, the lower the level of corruption.

H2b. The higher the level of future orientation practices, the lower the level of corruption.

Institutional collectivism and corruption

Institutional collectivism refers to the degree to which individuals are encouraged by societal intuitions to be integrated into groups within organizations and society (Javidan and House, 2001). Cultures that score high on institutional collectivism are integrated into strong cohesive groups: group goals take precedence over individual goals, people emphasize relatedness with the group, individuals are likely to engage in group activities, and individuals make greater distinctions between in-groups and out-groups (Gelfand *et al.*, 2004). However, societal institutional collectivism practices were significantly correlated with economic prosperity, public sector support for economic prosperity, and competitiveness index indicators (Gelfand *et al.*, 2004), whereas societal institutional collectivism values were negatively correlated with economic prosperity, public sector support for economic prosperity, and competitiveness index indicators (Gelfand *et al.*, 2004). GLOBE project results indicate that institutional collectivism practices are positively correlated with success

in basic science, whereas institutional collectivism values are negatively correlated with success in basic science (Gelfand *et al.*, 2004). In institutional collectivism societies, people prefer working together in collective styles, where cooperation and synergistic are more prominent than people desires (Hofstede and Bond, 1984; House *et al.*, 2002). Thus, in institutional collectivism culture, group goals and interests are more important than individual's goals and interests; therefore, it is likely to be less corrupted.

H3a. The higher the level of the institutional collectivism values, the lower the level of corruption.

H3b. The higher the level of institutional collectivism practices, the lower the level of corruption.

Human orientation and corruption

Human-oriented societies are likely to have projects that allow employees to be tolerant of mistakes (Heals *et al.*, 2004). These societies are friendly and sensitive and value harmony (Javidan and House, 2001). Low human orientation involves promoting self-interest and lack of consideration. According to the GLOBE findings, less human orientation is observed in societies that are economically developed, modern, and urbanized (Kabasakal and Bodur, 2004). Furthermore, in societies in which physical conditions and climate create difficulties for well-being, there is higher human orientation (Kabasakal and Bodur, 2004). GLOBAL results show that human orientation practices are negatively correlated with gross national product (GNP) *per capita*, but no relationship has been found between human orientation values and economic indicators (Kabasakal and Bodur, 2004). This hypothesis argues that human orientation has important implication for corruption. High human orientation societies emphasize caring, compassion, sympathy, and personal relations; therefore, corruption in such societies may be low, since corruption would typically include taking advantage of others for personal benefits.

H4a. The higher the level of human orientation values, the lower the level of corruption.

H4b. The higher the level of human orientation practices, the lower the level of corruption.

Performance orientation and corruption

Performance orientation reflects the extent to which a community encourages and rewards innovation, high standards, and performance improvement (Javidan, 2004). Performance orientation relates to issues of both external adaptation and internal integration in terms of the practices and values that have an impact on the way a society defines success in adapting to external challenges and the way the society manages interrelationships among its people (Javidan, 2004). A key element of performance orientation as a cultural dimension is the nature of the individual's relationship with the outside world (Javidan, 2004). High performance oriented societies tend to value those individuals and groups that produce results and accomplish their assignments (Javidan, 2004). The GLOBE project found that performance oriented societies are more economically prosperous and have high national competitiveness (Javidan, 2004). Societies that score high on performance

orientation tend to believe that schooling and education are critical for success, value training and development, emphasize results more than people, value competitiveness, value taking initiative, believe that anyone can succeed if he or she tries hard enough, and values what people do more than what people are (Javidan, 2004), which support ethical and honest behaviours. In high performance countries, people prefer a direct and explicit style of communication. In contrast, low performance orientation countries view feedback as discomforting and pay attention to one's family and background rather than performance. Therefore, high levels of performance orientation values and practices are expected to lower the level of corruption.

- H5a.* The higher the level of performance orientation values, the lower the level of corruption.
- H5b.* The higher the level of performance orientation practices, the lower the level of corruption.

Individual collectivism and corruption

Individual collectivism refers to the strength of ties within small groups such as family and close friends. In such countries, family members and close friends have strong expectations from each other. People in these countries can break rules and legal procedures to meet such expectation. Moreover, it is very common to favour a close friend or family member in recruiting or in allocating rewards and promotions (Javidan and House, 2001). In societies that score high on individualism, people tend to look after themselves or their immediate families, individual goals take precedence over group goals, people emphasize rationality, individuals are likely to engage in activities alone, and individuals make fewer distinctions between in-group and out-groups (Gelfand *et al.*, 2004). The GLOBE project results indicate in-group collectivism values and practices are negatively and significantly correlated with the success in basic science (Gelfand *et al.*, 2004). People in such societies tend to prefer tight social frameworks and strong belief in group decisions, and group loyalty is valued over efficiency (David and Ruhe, 2003). In collectivist cultures networks of friends and families are more oriented towards creating strong relationships that facilitate illegal transactions (Getz and Volkema, 2001). Therefore, family connections might encourage corruption (Gomez-Mejia *et al.*, 1998). Collectivistic cultures tend to apply different standards, laws, regulations and explanations to different groups and situations (Hofstede, 1991). Because of the existence of a double standard in a collectivist society, the level of corruption is expected to increase. However, Davis and Ruhe (2003) found a significantly negative correlation between Hofstede's individualism and the corruption index.

- H6a.* The higher the level of individual collectivism values, the higher the level of corruption.
- H6b.* The higher the level of individual collectivism practices, higher the level of corruption.

Power distance and corruption

Power distance is defined as the degree to which members of a society distribute, deploy, and react to the application of power, authority, and status. Power distance reflects the relationship between those who have the power and those who do not.

Countries that are high in power distance tend to expect obedience toward superiors and clearly distinguish between those with status and power and those without (House *et al.*, 2004). Higher power distance societies tend to be differentiated into classes: power is seen as providing social order, relational harmony, and role stability; information is controlled, different groups have different involvement, public corruption is high, and only a few people have access to resources (Carl *et al.*, 2004). High power distance cultures emphasize autocratic or paternalistic behaviour, while low power distance cultures prefer participative relations, equal rights, and the use of legitimate rather than coercive power (Hofstede, 1980, 1991; House *et al.*, 2004). Lower power distance societies tend to be more innovative (Hofstede, 1980) and more inventive (Shane, 1992). The GLOBE results show that societal power distance practices are associated with lower economic prosperity, less supportive public and social polices, lower national competitiveness, and less success in basic science (Carl *et al.*, 2004).

Some scholars point out that in power distance cultures, high-level public officials may believe that it is a privilege of their class to obtain personal benefits from their official positions (Getz and Volkema, 2001). On the other hand, members of the underclass who are part of the bureaucracy may try to improve their own positions through extortion (Getz and Volkema, 2001). Similarly, those who are not public officials may try to find creative ways, outside of the law, for raising their living standard. Thus, they may be inclined to offer or pay a bribe to low-level officials (Getz and Volkema, 2001). Moreover, in a low power distance society, superiors and subordinates regard themselves as equal in power; titles and status are less important, which leads to harmony and cooperation (Davis and Ruhe, 2003). Subordinates can dispute the leader's actions and therefore there is potentially less corruption (Francesco and Gold, 1998). Park (2003) indicated that higher power distance cultures are likely to be more corrupt than low power distance cultures. Davis and Ruhe (2003) found a positive and significant correlation between Hofstede's power distance and corruption. It is argued that countries with a high power distance are more likely to accept a lack of equality regarding power and authority; therefore, their individuals are more likely to have corrupt values and to accept corrupt practices.

H7a. The higher the level of power distance values, the higher the level of corruption in the society.

H7b. The higher the level of power distance practices, the higher the level of corruption in the society.

Gender egalitarianism and corruption

Gender egalitarianism refers to societies that seek to minimize differences between the roles of females and males in homes, organizations, and communities (Emrich *et al.*, 2004). Some societies with high levels of gender egalitarianism seek to minimize gender role differences, whereas other societies seek to maximize such differences (House *et al.*, 2004). Societies that score higher on gender egalitarianism tend to have more women in positions of authority, accord women a higher status in society, afford women a greater role in community decision-making, have a higher percentage of women participating in the labour force, and have similar levels of education for females and males (Emrich *et al.*, 2004). GLOBE found that gender egalitarianism practices are not correlated with any of the three indicators of economic health (economic prosperity, economic

productivity, and GNP *per capita*). In contrast, Emrich *et al.* (2004) found that gender egalitarianism values were positively correlated with the three indicators. Swamy *et al.* (2001) show that women are less involved in bribery. Empirical research has found that corruption is less severe where women hold a larger share of parliamentary seats and senior positions in the government bureaucracy, and comprise a larger share of the labour force (Swamy *et al.*, 2001; Dollar *et al.*, 2001). Swamy *et al.* (2001) indicated that gender differences may be attributable to socialization, or to differences in access to networks of corruption, or to knowledge of how to engage in corrupt practices, or to other factors. Moreover, Eckel and Grossman (1998) found that women are more socially orientated (selfless), and men more individually orientated (selfish), and that women behave more generously when faced with economic decisions. Women are more likely to exhibit “helping” behaviour. Therefore, countries that have lower gender egalitarianism are likely to be less corrupt.

H8a. The lower the level of gender egalitarianism values, the lower the level of corruption.

H8b. The lower the level of gender egalitarianism practices, the lower the level of corruption.

Assertiveness and corruption

Assertiveness refers to the extent to which a society encourages people to be tough, confrontational, assertive, and competitive versus modest and tender (Javidan and House, 2001). Highly assertive societies tend to prefer strong and direct language (Javidan and House, 2001). Less assertive societies prefer a less direct style of communication. Societies that are characterized by assertiveness encourage individuals to be aspiring, competitive, and to struggle for physical success (Javidan and House, 2001). However, in this study it is argued that societies with a high level of assertiveness are expected to practice a lesser level of corruption. Societies that score higher on assertiveness tend to value assertiveness, dominant and tough behaviour, try to have control over the environment, and try to act opportunistically and think of others as opportunistic (Den Hartog, 2004). Such characteristics will encourage people to fight unethical values and practices. Therefore, societies with a high level of assertiveness are expected to have a lower level of corruption.

H9a. The higher the level of assertiveness values, the lower the level of corruption.

H9b. The higher the level of assertiveness practices, the lower the level of corruption.

Controlling for economic and human development

Since there is a strong relationship between culture and economic development (Bagchi *et al.*, 2004), investigating the relationship between culture and corruption requires control of some macro-level indicators to remove the possibility of mediation by such variables (e.g. Bagchi *et al.*, 2004; Hofstede, 2001). Hofstede (2001) suggests the importance of using GNP *per capita* as an additional control variable to examine the effect of culture. Davis and Ruhe (2003) used a number of control variables that include population, population density, *per capita* GDP growth, *per capita* gross national income, government spending, and inflation rate to examine the relationship between

the cultural dimensions described by Hofstede and a country's corruption. Based on the results of previous research, this paper attempts to control for GDP *per capita* and the human development index to assess the effects of culture values and cultural practices. The level of economic and human development in a society are among the major economic variables that affect the level of corruption. For example, people in poor developing countries do not have the luxury of thinking about what is legal, and they are forced to use their position and power to seek rent (Park, 2003). The extant literature indicates that economic and human development affect corruption. Some studies indicate that a higher level of corruption is related to a higher level of GDP *per capita* in developing countries (Kuton *et al.*, 2007). Other studies found that the effect of corruption on GNP *per capita* depends on the countries' degree of openness, indicating that while in open economies corruption has a strong negative effect on GDP *per capita*, in closed economies corruption has no effect on GNP *per capita* (Neeman *et al.*, 2003). Based on the above discussion, GDP *per capita* and human development are expected to affect corruption.

H10a. GDP *per capita* and human development index are expected to interact with national culture values to affect corruption.

H10b. GDP *per capita* and human development index are expected to interact with national culture practices to affect corruption.

Research variables

Variables: dependent, independent and control

Perceived level of corruption is the dependent variable. The present study used the published data of CPI (Corruption Perception Index; Transparency International, 2003). Among policy makers, the CPI is the most widely disseminated index (Svensson, 2005). The CPI has been conducted by the University of Passau in Germany from 1996 up to the present.

Cultural values and practices dimensions in the GLOBE project include performance orientation, future orientation, assertiveness, uncertainty avoidance, power distance, institutional collectivism, individual collectivism, gender differentiation, and human orientation are the independent variables in the present study.

GDP *per capita* and human development index (HDI) represent the controlling variables in this study.

Measures and data sources

Data were obtained from well-established sources to increase validity and reliability. As for the dependent variable (corruption), the present study used the published data of the CPI (ranging from corruption free = 10 to totally corrupt = 0) in 2003 (Transparency International, 2003). The CPI is estimated by taking survey results from business people and experts regarding corruption in 133 countries. Lambsdorff (1999) indicated that perceived level of corruption is commonly a good indicator of the real level of corruption. The CPI measures the extent of corruption in the countries involved. The validity and reliability of the CPI has been documented in previous research (Lancaster and Montinola, 1997).

The culture dimensions were measured using data from the GLOBE project, which is considered more appropriate and representative than other projects such as Hofstede

(1983). Nyaw and Ng (1994) found that Hofstede’s classification of culture was limited in predicting ethical beliefs across countries. Heals *et al.* (2004) use cultural practices rather than cultural values to reflect the cultural reality rather than espoused values. Moreover, the validity and reliability of culture dimensions scales show high-level scores (House *et al.*, 2004). Furthermore, Hofstede’s results were reported over 25 years ago and some aspects of societal cultures may since have changed (Fernandez *et al.*, 1997). House and colleagues’ data set of the nine dimensions for measuring culture have not been used before in investigating the corruption phenomenon. Moreover, Hofstede’s study includes only three regions of the world. The data published by House and colleagues includes 62 countries representing all major geographic regions of the world and all different types of economic, political, and business institutional systems. The GLOBE research project is comprised of a team of 150 researchers who have collected data from 18,000 managers in the telecommunications, food, and banking industries. GDP *per capita* and the human development index (HDI; measured by the combined gross enrolment ratio for primary, secondary, and tertiary school) were obtained from the *Human Development Report* (United Nations Development Programme, 2003, 2004).

Results

Tables I-III outline a summary of the results. Pearson correlations and multiple regression were used to test the research hypotheses.

Results of the relationship between national culture and corruption

Based on the findings presented in Table I, statistical tests revealed a negative but significant correlation between uncertainty avoidance values and corruption ($r = -0.773, p = 0.000$). This indicates that a high score on uncertainty avoidance values is associated with a low score on CPI (high corruption). This finding points out that when uncertainty avoidance values are high, a country tends to be more corrupt. Therefore, *H1a* is rejected. On the other hand, the statistical test revealed positive and significant results for the relationship between uncertainty avoidance practices and corruption ($r = 0.680, p = 0.000$). The sign of the coefficient of uncertainty avoidance practices was positive; this means that a high score on uncertainty avoidance practices is associated with a high score on CPI (low corruption). This finding shows that when

Culture values	CPI	Culture practices	CPI
Uncertainty avoidance values	-0.773**	Uncertainty avoidance practices	0.680**
Future orientation values	-0.429**	Future orientation practices	0.553**
Institutional collectivism values	-0.357**	Institutional collectivism practices	0.275*
Human orientation values	0.132	Human orientation practices	-0.283*
Performance orientation values	-0.042	Performance orientation practices	0.337**
Individual collectivism values	-0.195	Individual collectivism practices	-0.730**
Power distance values	-0.038	Power distance practices	-0.411**
Gender egalitarianism values	0.380**	Gender egalitarianism practices	0.101
Assertiveness values	-0.091	Assertiveness practices	-0.74
GDP	0.910***	GDP	0.910**
Human development index	0.607***	Human development index	0.607***

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table I.
Cultural practices and values and the Corruption Perception Index (CPI)

Table II.
Corruption as a function
of cultural values:
standardized coefficients

Variables	Model 1	Model 2
GDP		0.784 ***
HDI		-0.068
Uncertainty avoidance values	-0.793 ***	-0.236 *
Future orientation values	-0.182	-0.092
Institutional collectivism	-0.024	-0.054
Human orientation values	0.165	-0.024
Performance orientation values	0.278	0.056
Individual collectivism	0.018	0.092
Power distance values	0.193	0.048
Gender egalitarianism values	-0.046	-0.097
Assertiveness values	0.003	-0.009
<i>F</i> statistic	10.695 ***	28.340 ***
<i>R</i> ²	0.658	0.871
Adjusted <i>R</i> ²	0.597	0.841

Notes: **p* < 0.05; ***p* < 0.01; ****p* < 0.001

Table III.
Corruption as a function
of cultural practices:
standardized coefficients

Variables	Model 1	Model 2
GDP		0.669 ***
HDI		-0.061
Uncertainty avoidance practices	0.223	0.159
Future orientation practices	0.159	0.049
Institutional collectivism practices	0.113	0.013
Human orientation practices	-0.277 **	-0.138 *
Performance orientation practices	0.133	0.099
Individual collectivism practices	0.504 ***	-0.153 *
Power distance practices	0.147	-0.021
Gender egalitarianism practices	0.058	0.073
Assertiveness practices	-0.144	-0.161 **
<i>F</i> statistic	14.102 ***	48.880 ***
<i>R</i> ²	0.717	0.921
Adjusted <i>R</i> ²	0.667	0.902

Notes: **p* < 0.05; ***p* < 0.01; ****p* < 0.001

uncertainty avoidance culture practices are high, a country tends to be less corrupt. This finding supports the acceptance of *H1b*.

Regarding *H2a*, the results show a negative and significant correlation between future orientation values and corruption ($r = -0.429$, $p = 0.001$), indicating that a high score on future orientation values is associated with a low score on CPI (high corruption). This finding does not support *H2a* regarding the relationship between future orientation values and corruption. When the future orientation value is high, a country tends to be more corrupt. With regard to *H2b*, the results reveal a positive and significant correlation between future orientation practices and corruption ($r = 0.553$, $p = 0.000$). This means a high score on future orientation practices is associated with a

high score on CPI (low corruption). This finding shows support for *H2b*, which means that greater future orientation practices are associated with lower levels of corruption.

The results of testing *H3a* reveal a negative but significant correlation between institutional collectivism values and corruption ($r = -0.357$, $p = 0.005$), indicating that a high score on institutional collectivism values is associated with a low score on CPI (high corruption). This result rejects *H3a* regarding the hypothesized relationship between institutional collectivism values and corruption. The results of testing *H3b* show a positive and significant correlation between institutional collectivism practice and corruption ($r = 0.275$, $p = 0.034$). This shows that a high score on institutional collectivism practices is associated with a high score on CPI (low corruption), which means the greater the collectivism practices, the lower the level of corruption. This result supports *H3b* regarding the hypothesized relationship between institutional collectivism practices and corruption.

Regarding *H4a*, the results show a positive but non-significant correlation between human orientation values and corruption ($r = 0.123$, $p = 0.315$). This finding rejects *H4a* for the relationship between human orientation values and corruption. With regard to *H4b*, the results reveal a negative but significant relationship between human orientation practices and corruption ($r = -0.283$, $p = 0.029$), indicating that a high score in human orientation practices is associated with a low score on CPI (high corruption). The findings support *H4b* regarding the negative relationship between human orientation practices and corruption. These results mean that societies practising human orientation are less corrupt.

As for *H5a*, statistical tests reveal a negative and non-significant correlation between the level of performance orientation values and corruption ($r = -0.042$, $p = 0.751$). The finding rejects *H5a* for the existence of a relationship between the level of performance orientation values and corruption. With regard to *H5b*, statistical tests reveal a positive and significant relationship between the level of performance orientation practices and corruption ($r = 0.337$, $p = 0.008$), which means that a high score on performance orientation practices is associated with a high score on CPI (low corruption), indicating that the greater the performance orientation practices, the lower the level of corruption. The finding accepts *H5b* for the hypothesized relationship between the level of performance orientation practices and corruption.

The results of testing *H6a* reveal a negative and non-significant relationship between individual collectivism values and corruption ($r = -0.195$, $p = 0.134$). This finding refutes *H6a* regarding the relationship between group collectivism practices and corruption. The results of testing *H6b* reveal a negative and significant relationship between individual collectivism practices and corruption ($r = -0.730$, $p = 0.000$) indicating that a high score on group collectivism practices are associated with a low score on CPI (high corruption). This finding accepts *H6b* regarding the negative relationship between individual collectivism practices and corruption.

The results of testing *H7a* indicate a negative and non-significant relationship between power distance values and corruption ($r = -0.038$, $p = 0.774$). This finding rejects *H7a* regarding the negative relationship between power distance values and corruption. With regards to *H7b*, results show a negative and significant relationship between power distance practices and corruption ($r = -0.411$, $p = 0.001$) indicating that a high score on power distance practices is associated with a low score on CPI (high corruption). This finding supports *H7b* for the relationship between power

distance practices and corruption. Therefore, societies that are characterized by high power distance practices are more corrupt.

The results of testing *H8a* reveal a positive and significant relationship between a low level of gender differentiation values and corruption ($r = 0.38, p = 0.003$), indicating that a low score on gender egalitarianism values (high gender egalitarianism on the GLOBE scale of gender egalitarianism) is associated with a low CPI score (high corruption). This result supports *H8a* regarding the expected relationship between the level of gender differentiation values and corruption. The results of testing *H8b* reveal a positive and non-significant relationship between the level of gender differentiation practices and corruption ($r = 0.101, p = 0.444$). This finding does not confirm any relationship between gender differentiation practices and corruption.

The result of testing *H9a* reveal a negative and non-significant relationship between the level of assertiveness values and corruption ($r = -0.091, p = 0.487$). The findings reject *H9a* regarding the relationship between the level of assertiveness values and corruption. With regard to *H9b*, results show a negative and non-significant relationship between the level of assertiveness practices and corruption ($r = -0.074, p = 0.573$). The findings reject the relationship between the level of assertiveness practices and corruption.

National culture and corruption after controlling for GDP and HDI

Regarding *H10a*, the regression analysis in Table II shows that after controlling for GDP and HDI variables, uncertainty avoidance culture values remains significant in both models 1 and 2. This means the uncertainty avoidance variable explained a significant amount of the variance in country corruption. The adjusted R^2 value suggests that the model explains 59.7 per cent of the variance in the corruption variable. This result means that high uncertainty avoidance culture values encourage corruption and unethical behaviours.

As for hypothesis *H10b*, after inserting the control variables of GDP and HDI into the equation of the cultural practices model (see Table III), the findings show that human orientation practices and individual collectivism practices remain significant in both models. This means human orientation practices and individual collectivism practices explained a significant amount of the variance in country corruption. The regression analysis in Table III shows that human orientation practices and individual collectivism practices explained a significant percentage of corruption variance even after the entry of the control variables into the equation. The adjusted R^2 value suggests that the model explains 66.7 per cent of the variance in the corruption variable. These findings indicate that societies that are characterized by human orientation practices and individual collectivism practices are more corrupt. Moreover, the model 2 regression displayed in Table III shows that future orientation practices and assertiveness practices explain a significant portion of corruption variance when controlling variables are used. However, the same variables failed to explain a significant amount of the variance in corruption when control variables are not used, as displayed in Table III.

Discussion

The results of testing the hypotheses suggest the acceptance of one hypothesis out of nine regarding the proposed relationships between national culture values and corruption. The results of this investigation suggest that high gender egalitarianism

values are associated with corruption. This finding is consistent with previous studies that used Hofstede's data set (Park, 2003; Davis and Ruhe, 2003). As regards gender egalitarianism practices, the result of this investigation found no relationship between gender egalitarianism practices and corruption. This result is not consistent with other studies (Swamy *et al.*, 2001; Glover *et al.*, 1997) that found support for the influence of gender on corruption and ethical choice. However, some studies have found conflicting results regarding gender effects within the context of ethical decision choice (Chonko and Hunt, 1985; Ruegger and King, 1992; Serwinck, 1992).

Results from hypothesis testing suggest the acceptance of seven out of nine hypotheses regarding the proposed relationships between national culture practices and corruption. This finding demonstrates that uncertainty avoidance practices, future orientation practices, institutional collectivism practices, human orientation practices, performance orientation practices, and individual collectivism practices are all correlated with corruption.

The findings also pointed out that uncertainty avoidance practices reduce the level of corruption, this finding suggest that in societies that are characterized by high levels of uncertainty avoidance practices, people are more likely to be more respectful of formal rules. These findings support the institutional reform perspective that concentrates on standard operating procedures. The findings suggest that the higher the level of future orientation practices, the lower the level of corruption. This result reflects the nature of future orientation practices that encourage and reward future orientation behaviours such as strategic planning, career planning, setting vision, mission, and goals. These behaviours place a higher emphasis on the long-term success and represent the causes of ethical behaviours. The findings suggest that institutional collectivism practices are associated with low levels of corruption. In this case, people are tightly integrated and individuals belong to groups that think which reinforce ethical standards and anti-corruption behaviours. The present findings also suggest collectivism practices are associated with high levels of corruption; therefore, people in societies that are characterized by in-group collectivism practices are more corrupt and are giving the goals of the in-group a higher priority than the goals of the public. These individuals interpret laws, rules, and regulations for the benefit of their groups and close friends.

As regards performance orientation practices, the results of this investigation suggest that high levels of performance orientation practices are associated with lower levels of corruption, indicating that achievement-oriented cultural practices and performance excellence reduce corruption.

The results of this study emphasize the importance of distinguishing between cultural values and cultural practices in understanding corruption. This support the observations of Heals *et al.* (2004), who use cultural practice rather than cultural values to reflect cultural realities instead of espoused values. These findings are not totally surprising given the negative relationships between national culture values and practices scores in seven out of nine dimensions. It also reflects a small change in cultural practices over the past 25 years.

However, even after controlling for selected economic variables, culture values variables fail to explain a significant portion of the variance in corruption, except for the uncertainty avoidance values that remain significant. This finding is not in agreement with Davis and Ruhe (2003). They indicate that uncertainty avoidance values fail to explain a significant amount of corruption when controlling for GDP

growth, government spending, inflation, population, and population intensity. However, human orientation practices and individual collectivism practices remain significant after controlling for the same economic variables in investigating the relationship between cultural practices and corruption.

With regard to human orientation practices, societies that have high levels of human orientation practices are likely to have projects that allow people to be tolerant of mistakes (Heals *et al.*, 2004), friendly, sensitive, and in harmony with each other (Javidan and House, 2001). With regard to individual collectivism practices, people in these societies look after their own interests, do not pay attention to their organizations, and work as a rent seeker, which increases corruption and unethical behaviours. The differences in findings may be due to using different datasets of cultural values and different controlling variables.

Conclusions

The motivation of this study was the lack of empirical evidence regarding the relationship between culture and corruption. Using a more recent data set of culture classification, this results of this study validates the importance of a cultural perspective in explaining corruption. Another contribution of this research study is distinguishing between culture values and culture practices.

The results of this study contribute to the growing empirical base of literature on corruption and also highlights the usefulness of the dimensions reported by House *et al.* (2002, 2004).

Predicting corruptive practices using cultural differences is important for multinational and international firms. It also helps international companies adopt proper human resource management strategies with regard to recruiting, selection, compensation, performance appraisal, and training and development. These findings also provide implications for international firms with regards to the internal marketing of ethical behaviours (e.g. how nepotism can be viewed positively by some and negatively by others).

The findings suggest that individual collectivism practices and human oriented practices encourage corrupted practices. The findings also pointed out that uncertainty avoidance values increase levels of corruption. Therefore, policy makers should establish institutional system to rationalize and systemize mechanisms such as flexible incentive and promotion systems. Policy makers are also highly recommended to building and strengthening the culture of teamwork.

Effective approaches for fighting corruption depend on societal culture (Husted, 1999) and deeper analysis of its underlying causes and infrastructure (Ashour, 2006). The findings of this study provide a diagnostic framework of the cultural determinants of corruption. Therefore, policy makers can use these results to guide them in adopting a strategic perspective to fight corruption through implementing institutional reforms that concern the dominant national culture in more corrupted countries. For example, societies with high uncertainty avoidance practices should adopt long-term reform programs that emphasize institutional mechanisms to improve the presence of uncertainty avoidance practices.

These findings also provide insights for international institutions such as the World Bank, the United Nations, the IMF, and other development institutions by providing a novel perspective in explaining corruption.

Limitations and future research

Using subjective perceptions while measuring culture dimensions and corruption are prone to biases. Therefore, this study contains limitations common to all research using self-estimated data. Indeed, the perception of corruption levels, culture values, and culture practices might be influenced by level of economic growth, lack of efficiency in societal organizations, political systems, level of education and awareness, and political identity of people.

The ability to generalize the findings is limited to the GLOBE project context. Structural equation modelling techniques should be used before generalizing the interdependencies of the dimensions. Future research may emphasize some other determinants of national corruption such as the dominant religion, and people's understanding of their religions, national language, quality of governance, human development indicators, and availability of information.

Moreover, further research is needed regarding corruption at the organizational level of analysis in both private and public organizations. Replication of this research could be useful using different measures of corruption such as that of Kaufmann *et al.* (1999), who use a variety of indicators collected by international organizations, non-governmental organizations, and political and business rating agencies. Future research should also examine the nature and intensity of corruption in developed countries compared to developing countries. It is also highly recommended to study the consequences of corruption at the level of the intellectual capital, human capital, and social capital of a nation (Bontis, 2004).

References

- Ashkanasy, N., Gupta, V., Mayfield, M. and Roberts, E. (2004), "Future orientation", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Ashour, A. (2006), "Combating corruption: systemic and strategic perspectives", UNDP POGAR concept paper, United Nations Development Programme, Beirut.
- Bagchi, K., Hart, P. and Peterson, M.F. (2004), "National culture and information technology product adoption", *Journal of Global Information Technology*, Vol. 7 No. 4, pp. 29-46.
- Bontis, N. (2004), "National intellectual capital index: a United Nations initiative for the Arab region", *Journal of Intellectual Capital*, Vol. 5 No. 1, pp. 13-39.
- Carl, D., Gupta, V. and Javidan, M. (2004), "Power distance", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Chonko, L.B. and Hunt, S.D. (1985), "Ethics and marketing management: an empirical examination", *Journal of Business Research*, Vol. 13, pp. 339-59.
- Davis, J.H. and Ruhe, J. (2003), "Perceptions of country corruption: antecedents and outcomes", *Journal of Business Ethics*, Vol. 43 No. 4, pp. 275-88.
- Den Hartog, D. (2004), "Assertiveness", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Dollar, D., Fisman, R. and Gatti, R. (2001), "Are women really the 'fairer' sex? Corruption and women in government", *Journal of Economic Behavior & Organization*, Vol. 46, pp. 423-9.
- Eckel, C.C. and Grossman, P.J. (1998), "Are women less selfish than men? Evidence from dictator experiments", *Economic Journal*, Vol. 108, pp. 726-35.

- Emrich, C., Denmark, F. and Den Hartog, D. (2004), "Cross-culture difference in gender egalitarianism: implications for societies, organizations, and leaders", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Fernandez, D.R., Carlson, D.S., Stepina, L.P. and Nicholson, J.D. (1997), "Hofstede's country classification 25 years later", *Journal of Social Psychology*, Vol. 137, pp. 43-54.
- Francesco, A. and Gold, B. (1998), *International Organizational Behaviors*, Prentice-Hall, Englewood Cliffs, NJ.
- Gelfand, M., Bhawuk, D., Nishii, L. and Bechtold, D. (2004), "Individualism and collectivism", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Getz, K. and Volkema, J. (2001), "Culture, perceived corruption, and economics", *Business & Society*, Vol. 40 No. 1, pp. 7-30.
- Glover, S.H., Bumps, M.A., Logan, J.E. and Ciesla, J.R. (1997), "Re-examining the influence of individual values on ethical decision making", *Journal of Business Ethics*, Vol. 16, pp. 1319-29.
- Glynn, P., Kobrin, S. and Naim, M. (1997), "Globalization of corruption", paper presented at the Southern Africa Economic Summit, Cape Town, 22-24 May.
- Gomez-Mejia, L., Balkin, D. and Cardy, R. (1998), *Managing Human Resources*, Prentice-Hall, Englewood Cliffs, NJ.
- Greenberger, R.S. (1995), "US firms lost business due to bribes, report says", *Wall Street Journal*, 5 October.
- Harris, R. and Davison, R. (1999), "Anxiety and involvement: cultural dimensions of attitudes toward computers in developing countries", *Journal of Global Information Management*, Vol. 7, pp. 26-38.
- Hasan, H. and Ditsa, G. (1999), "The impact of culture on the adoption of IT: an interpretive study", *Journal of Global Information Management*, Vol. 7, pp. 5-15.
- Heals, J., Cockcroft, S. and Radulescu, C. (2004), "The influence of national culture on the level and outcome of IS development decisions", *Journal of Global Information Technology*, Vol. 7, pp. 3-28.
- Heidenheimer, A.J. (1989), "Perspectives on the perception of corruption", in Heidenheimer, A.J., Johnston, M. and LeVine, V.T. (Eds), *Political Corruption: A Handbook*, Transaction Publishers, New Brunswick, NJ, pp. 149-63.
- Hofstede, G. (1980), *Culture's Consequences: International Differences in Related Values*, Sage Publications, Beverly Hills, CA.
- Hofstede, G. (1983), "National culture in four dimensions", *International Studies of Management and Organization*, Vol. 13, pp. 46-74.
- Hofstede, G. (1991), *Cultures and Organizations: Software of the Mind*, McGraw-Hill, New York, NY.
- Hofstede, G. (2001), *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, Sage Publications, Beverly Hills, CA.
- Hofstede, G. and Bond, M. (1984), "The need for synergy among cross-culture studies", *Journal of Cross Culture Psychology*, Vol. 15, pp. 417-33.
- House, R., Javidan, M., Hanges, P. and Dorfman, P. (2002), "Understanding cultures and implicit leadership theories across the globe: an introduction to Project GLOBE", *Journal of World Business*, Vol. 37, pp. 3-10.

-
- House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds) (2004), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Husted, B. (1999), "Wealth, culture, and corruption", *Journal of International Business Studies*, Vol. 30, pp. 339-60.
- Husted, B. (2002), "Culture and international anti-corruption agreements in Latin America", *Journal of Business Ethics*, Vol. 37, pp. 403-12.
- Independent Commission Against Corruption (1998), "A major investigation into corruption in the former State Rail Authority of New South Wales", Independent Commission Against Corruption, Sydney.
- Javidan, M. (2004), "Performance orientation", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Javidan, M. and House, R. (2001), "Culture acumen for the GLOBE manager: lessons from Project GLOBE", *Organizational Dynamics*, Vol. 29, pp. 289-305.
- Kabasakal, H. and Bodur, M. (2004), "Human orientation in societies, organizations, and leader attributes", in House, R., Hanges, P., Javidan, M., Dorfman, P. and Gupta, V. (Eds), *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, Sage Publications, Thousand Oaks, CA.
- Kaufmann, D., Kraay, A. and Zoido-Lobaton, P. (1999), "Governance matters", Working Paper No. 2196, World Bank Policy Research, Washington, DC, available at: <http://go.worldbank.org/EBQKMQCJ81>
- Kuton, A.M., Douglas, T.J. and Judge, W. (2007), "Does corruption hurt economic development? Evidence from Middle Eastern, North Africa, and Latin American countries", available at: www.siue.edu
- Lambdsdorff, G.J. (1999), "Corruption in empirical research – a review", working paper, Transparency International, Göttingen.
- Lancaster, T. and Montinola, G. (1997), "Toward a methodology for the comparative study of political corruption", *Criminal Law and Social Change*, Vol. 27, pp. 185-206.
- Mauro, P. (1995), "Corruption and growth", *Quarterly Journal of Economics*, Vol. 109, pp. 681-712.
- Mauro, P. (1998), "Corruption: causes, consequences, and agenda for further research", *Finance & Development*, Vol. 35 No. 1, pp. 11-14.
- Mead, R. (1998), *International Management*, 2nd ed., Wiley-Blackwell, London.
- Myers, M.D. and Tan, F.B. (2002), "Beyond models of national culture in information systems research", *Journal of Global Information Management*, Vol. 10, pp. 24-32.
- Neeman, Z., Paserman, M.D. and Simhon, V. (2003), "Corruption and openness", available at: www.ageconsearch.umn.edu
- Nyaw, N.I. and Ng, I. (1994), "A comparative analysis of ethical beliefs: a four country study", *Journal of Business Ethics*, Vol. 13, pp. 543-55.
- Park, H. (2003), "Determinants of corruption: a cross-national analysis", *The Multinational Business Review*, Vol. 11, Fall, pp. 29-48.
- Rokeach, M. (1972), *Beliefs, Attitudes and Values: A Theory of Organization and Change*, Jossey-Bass, San Francisco, CA.
- Ruegger, D. and King, E.W. (1992), "A study of the effect of age and gender upon student business ethics", *Journal of Business Ethics*, Vol. 11, pp. 179-86.

- Scott, V., Saviour, N. and James, B. (1993), "The effects of culture on ethical decision-making: an application of Hofstede's typology", *Journal of Business Ethics*, Vol. 12, pp. 753-60.
- Serwinck, P.J. (1992), "Demographic and related differences in ethical views among small businesses", *Journal of Business Ethics*, Vol. 11, pp. 555-66.
- Shane, S. (1992), "Why do some societies invent more than others?", *Journal of Business Venturing*, Vol. 7, pp. 29-46.
- Svensson, J. (2005), "Eight questions about corruption", *Journal of Economic Perspectives*, Vol. 19, pp. 19-42.
- Swamy, A., Knack, S., Lee, Y. and Azfar, O. (2001), "Gender and corruption", *Journal of Development Economics*, Vol. 64, pp. 25-55.
- Transparency International (2003), "Global Corruption Report 2003", available at: www.transparency.org
- United Nations Development Programme (2003), *Human Development Report*, available at: www.hdr.undp.org/en/reports/global/hdr/2003
- United Nations Development Programme (2004), *Human Development Report*, available at: www.hdr.undp.org/en/reports/global/hdr/2004
- van Klaveren, V.J. (1989), "The concept of corruption", in Heidenheimer, A.J., Johnston, M. and LeVine, V.T. (Eds), *Political Corruption: A Handbook*, Transaction Publishers, New Brunswick, NJ, pp. 89-91.
- World Bank (1997), *World Development Report*, Oxford University Press, Oxford.
- Zhao, J.H., Kim, S.H. and Du, J. (2003), "The impact of corruption and transparency on foreign direct investment: an empirical analysis", *Management International Review*, Vol. 43, pp. 41-62.

Further reading

- Larmour, P. (2001), "Corruption, culture, and transferability: what can be learned from Australia?", *Journal of Contingences and Crisis Management*, Vol. 9, pp. 14-20.
- Shleifer, A. and Vishny, R. (1993), "Corruption", *Quarterly Journal of Economics*, Vol. 108, pp. 559-617.
- Stajkovic, A. and Luthans, F. (1997), "Business ethics across cultures: a social cognitive model", *Journal of World Business*, Vol. 32, pp. 17-34.

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