Institutional Pillars and Corruption at the Societal Level

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ABSTRACT. This article studies the effects of social institutions on organizational corruption at the societal level by focusing on the possible interactions between the institutional pillars that have been identified in past research. Based on these three institutional aspects or pillars, this article tests the interactive effects of social institutions among societies throughout the world. The results suggest that the three institutional pillars have significant interactive effects on organizational corruption at the societal level. A discussion of the implications of the research findings for researchers and practitioners is given.

KEY WORDS: institutional pillars, organizational corruption

Many researchers have studied the influence of social institutions, including societal culture, on organizational and individual activities (Hofstede, 1980; Murir, 2002; Russo, 2003). However, insufficient research has been conducted on the relationship between social institutions and organizational corruption at the societal level. Studying this issue will contribute to the development of organizational and managerial theories in several areas, including institutional theory, international business models, and anticorruption literature. For example, current institutional theory studies the processes by which social institutions influence firms' activities, which are often relevant to the issue of fighting corruption at the societal level. Institutional theory suggests that social institutions consist of three aspects: the regulative, the normative, and the cognitive (Scott, 1995). However, there has been some dissent among authors as to how these three aspects of institutions evolve and interact with each other. Scott (1995) depicted the regulative, normative, and cognitive institutional pillars as analytically independent and self-contained and stated

that co-evolution or interaction could not be expected. Hirsch countered that such a notion "seriously weakens the power of this otherwise intriguing and creative new typology" (1997, p. 1709) and opined that the institutional pillars are not either analytically or operationally distinct; rather, they overlap, so that the development of one aspect will influence the development of the other aspects. There has been little empirical research to test this hypothesis in a comprehensive way, and therefore it would be of interest to develop an empirical study of this issue.

The literature on organizational corruption focuses mainly on issues at the individual or firm level and pays insufficient attention to the effects of social institutions. Some research has suggested some effects of cognitive-cultural institutions, such as the societal-level cultural values of uncertainty avoidance or masculinity, on organizational corruption (Getz & Volkema, 2001; Husted, 1999; Robertson & Watson, 2004). But there has been no empirical research to test the joint effects of this dimension of social institutions with the regulative and normative dimensions of these institutions. An empirical study of these joint effects would help in understanding the relationships between these social institutions and organizational corruption at the societal level. We first provide a brief review of the relevant literature, and we then use this to develop our hypotheses and report our empirical testing. In the development of this article, we will cite or discuss many studies or observations from two East Asian societies, Hong Kong and Singapore. The main reason for the adoption of this approach is that the two societies can be clearly compared, and the authors of this article are more familiar with the institutions and anticorruption practices in these two societies.

Literature review

Institutional theory is thought to offer a powerful explanation of both individual and organizational actions and processes (Dacin et al., 2002). According to this theory, institutional elements influence the interpretation of issues or actions as they emerge and persist (Scott, 2001), including the definition of organizational corruption and the delineation of ethical or unethical behavior in an organization. Social institutions include social and cultural meaning systems, or norms, that are taken for granted and that define social reality (DiMaggio, 1988; Scott, 2001). These norms are the "rules of procedures that actors employ flexibly and reflexively to assure themselves and those around them that their behavior is reasonable" (DiMaggio & Powell, 1991, p. 20) and that act as unwritten rules of proper social or organizational conduct to which organizations or individuals must adhere. Institutional theory suggests that both organizational and individual activities must reflect the norms of their institutional environments, and that therefore rather than being the result of a rational strategic purpose, organizations are "constructed as legitimate agents of great collective purposes, from technical rationality and social progress, to social integration and justice" (Meyer & Scott, 1992, p. 1).

In studying institutional systems, Scott (1995) identified three institutional aspects, which are also called institutional pillars: the regulative, the normative, and the cognitive-cultural. According to other research, all three of these aspects or dimensions may have elements that may affect organizational corruption at the societal level.

Regulative (or legal) aspects of institutions

The regulative aspects of institutions most commonly take the form of regulations and laws (Scott, 2001) that guide organizational actions and perspectives by coercion or the threat of government sanctions. In responding to regulative institutions, one might ask, "What are my interests in this situation?" (March, 1981). One can identify several regulative elements of social institutions that are relevant to the issue of anticorruption measures in societies throughout the world. For example, the regulations or actions that are taken by governments can be seen as the regulative aspects of social institutions. Considering their own interests, organizations that operate in these societies are likely to obey or follow these government institutions.

Research has suggested various relationships between regulatory institutions and organizational corruption at the societal level. Taking the literature on the regulatory institutions in Hong Kong and Singapore as an example, corruption is said to have been a way of life in Singapore during the British colonial period (Quah, 1999, p. 490). Similarly, before the establishment of anticorruption institution, the Independent Commission Against Corruption (ICAC) in 1974, Hong Kong was also a society with a high level of organizational corruption. According to the literature:

> not only [do] illegal businesses pay "protection money" but honest businessmen in their rightful claim for government service or permits are too often looked upon as being "square" and "inarticulate" – forgive me for not finding a suitable translation for the Cantonese (shuk shing) – if they fail to "grease the machine", thus suffer from undue neglect and unfair competition (ICAC, 1999, p. 14).

Neither Hong Kong nor Singapore had effective anticorruption government institutions in the colonial period, and as a result widespread and institutionalized corruption remained in both societies for many years. In Hong Kong, it was not until 1974 that an event triggered a significant change in its regulatory institutions. This event was the successful escape in 1973 of Peter Godber, the chief superintendent of the Hong Kong Police, after being found to possess millions of dollars that were quite disproportionate to his official earnings. Godber was given a week by the court to explain his unearned wealth. In that week, Godber slipped out of Hong Kong to join his wife and fortune awaiting him in Britain. This case caused uproar across Hong Kong society in the form of street protests, condemnations by the media, and other social movements. All this put huge public pressure on the government to take decisive action against corruption, and it was during this period of crisis that a government institution, ICAC, was set up. As an independent agency that reported directly to the governor of Hong Kong, the ICAC made a significant contribution to the anticorruption struggle in Hong Kong.

Whereas Hong Kong still relies mainly on the ICAC to fight corruption, Singapore's struggle against corruption has been a more comprehensive campaign that has been coordinated directly by its top government leaders, which has made the social institutions in Singapore totally consistent with the country's anti-corruption activities. Specifically, as soon as it became independent from British rule in 1959, Singapore set up a government organization, the Corruption Practices Investigation Bureau (CPIB). Since then, the Singaporean government has ensured that the activities of the CPIB are totally supported by all regulative institutions in society. This institutional environment is a combination of institutional elements from both the West and the East. Compared with the institutions in Hong Kong, Singapore's regulatory institutions have many more of the cultural characteristics of traditional Chinese societies, such as the significant role that is played by a father-like top leader, a greater emphasis on shared collectivistic values, and more government-controlled decision-making in fighting corruption. Many authors have documented these characteristics. Fong et al. (1989), for example, have stated that "probably nowhere in the world are state policies to organize a country's people and to influence its values and attitudes so extensive and pervasive" (p. 129). When explaining Singapore's success against corruption, Jones (1999) pointed out:

> perhaps the most telling factor in combating corruption has been the strict anti-corruption ethos throughout the public service. This has been exemplified and reinforced by the commitment and determination of the political and administrative leadership to ensure corrupt free institutions. The achievement of and the need to maintain "clean and honest government" have been repeatedly emphasized in speeches by leading politicians in Singapore. (Jones, 1999, p. 7)

These regulative elements seem to make the Singaporean system more efficient and effective than that of Hong Kong in the struggle against corruption. In Hong Kong there have been continuous conflicts between the police force and the ICAC over the issue of investigating corruption. One of the best-known cases is the "partial amnesty" that was declared by the Hong Kong government on Nov. 5, 1977 after the ICAC tried to arrest over a hundred police officers from three Kowloon divisions for alleged involvement in syndicated corruption. Four thousand policemen held a meeting and drew up a petition to the government, which was later signed by over 11,000 officers out of a total force of some 17,000. Faced with this "majority vote," Sir Murray Maclehose, the governor of Hong Kong at the time, sent a directive to the ICAC that essentially stated that in the future the ICAC would not normally act on complaints or evidence that related to offenses that were committed before Jan. 1, 1977 (ICAC, 1999, p. 58). Another more recent case is the investigation into some local newspapers that took place in 2004. By appealing for public support and taking legal action, these local newspapers succeeded in preventing the ICAC from reading documents that were relevant to a corruption case.

Similar cases have not arisen in Singapore since independence. Regardless of when it was committed, an act of corruption in Singapore will be dealt with, even after the offender has died. As Jones (1999) observed:

> if the offender is deceased, the court can issue a confiscation order against his/her estate. The main anti-corruption agency, the Corrupt Practice Investigation Bureau, has been vested with substantial powers to cross-examine witnesses and to investigate and arrest officials suspected of corruption, including the power to inspect bank accounts. (Jones, 1999, p. 7)

Moreover, the Singaporean agency is not subject to the legal or political difficulties that the ICAC often encounters in Hong Kong. Whereas the actions of the ICAC in Hong Kong are often challenged by other organizations or interest groups, such as a certain political party or group, a police union, or a press association, the anticorruption agency in Singapore has never met with such opposition, because the social institutions in Singapore make it easier for the CPIB to fight corruption unopposed. This observation is consistent with evidence from other sources. One of the most widely cited measurements of corruption is Transparency International's Corruption Perceptions Index (CPI), which has been shown to have a very significant correlation with other commonly adopted measurements of corruption, such as the Black Market Activity Index and the Index on Overabundance of Regulations (cf. Wilhelm, 2002). According to the CPI, although

Hong Kong and Singapore have done better than industrialized countries such as France, Italy, Japan, and, in recent years, the United States, Singapore has consistently outperformed Hong Kong in its anti-corruption scores. When the CPI was first published in 1995, Singapore was ranked third and Hong Kong was only 17th, and this distance has remained basically unchanged since then (cf. http://www. transparency.org).

Normative (or social) aspects of institutions

The normative (or social) aspects of institutions generally take the form of rules of thumb, occupational standards, and educational curricula (Scott, 2001). Their ability to guide organizational action and belief stems largely from social obligations. Organizations often comply with normative aspects in conformity to previously established norms. In responding to a normative institution, one might ask, "Given my role in this situation, what is expected of me?" (March, 1981).

Some normative institutions may be associated with organizational corruption at the societal level. For example, societies in East Asia emphasize personal connections or relationships when doing business, and as a result some organizational behavior in business, such as the practice of "rice-case expenses" in South Korea (Kim, 1999), are considered normal and necessary. However, these types of organizational and individual behavior may explain, at least partly, many of the problems with corruption in these societies. The widespread corruption that existed in Hong Kong before the mid-1970s can be at least partly attributed to some normative practice at that time:

> the "unofficial" way of doing business not only spread but became institutionalized, "tea money", "black money", "hell money" – whatever the phrase – became not only well-known to many Hong Kong people, but accepted with resignation as a way of life (ICAC, 1999, p. 12).

The most important normative factor that is relevant to the issue of corruption seems to be the level of governmental intervention in social and economic activities, which is related to the rule of law. Although most countries have a legal system, the

rule of law varies depending on whether governmental intervention is considered normative or not. In some societies, people do not consider governmental intervention to be normative and make great efforts to ensure that their legal and economic activities remain independent of the intervention of the government or powerful governmental officials. That is the situation in Hong Kong. In these societies, the level of governmental intervention in economic activities is normally low. In other societies, by contrast, people may allow a much higher level of governmental intervention in legal, economic, and social activities. This is the situation in Japan, South Korea, and Singapore.

It is arguable that, at the societal level, governmental intervention can be considered a normative institution. The reason is that a government is neither cognitive-cultural nor regulative institution. On the one hand, governmental intervention is not a cognitive-cultural factor because people will not obey it unconsciously. Moreover, societies with similar cultural backgrounds, such as Hong Kong and Singapore, allowed significant levels of governmental intervention long before the changes of their cognitive-cultural institutions. Accordingly, governmental intervention is not a cognitive-cultural factor. On the other hand, governmental intervention is not a regulative institution either, as none would be punished by any regulative organizations just because it has a high or low level of governmental intervention. The levels of governmental intervention in East Asia, for example, are mainly decided in accordance with previously established norms. As a result, Hong Kong has always had a low level of governmental intervention, and any increase in governmental intervention in Hong Kong will meet strong resistance from society, whereas strong governmental intervention in Singapore, Japan, or South Korea is always considered normative or acceptable by the societies.

Some research has suggested that the level of governmental intervention has a positive relationship with the level of organizational corruption (e.g., Acemoglu & Verdier, 2000; Mbaku, 1999). The main reason is that, when there is a high level of governmental intervention, powerful individuals or government officials may have more control over the allocation of social resources and thus more opportunities to act according to their own interests,

which may lead to a higher level of corruption in the society (Lee, 1995).

However, there is an insufficient empirical evidence on the relationship between governmental intervention and corruption. Empirical observation has also suggested that in some East Asian societies with a high level of governmental intervention in economic activities, such as Singapore, organizational corruption is well under control. Accordingly, the actual relationship between this normative factor and organizational corruption at the societal level remains unclear. It would be interesting to test this relationship.

Cognitive (or cultural) aspects of institutions

The cognitive (or cultural) aspects of institutions embody the symbols, words, signs, gestures, and the cultural rules and framework that guide the understanding of the nature of reality and the frames through which that meaning is developed (Scott, 2001). Organizations will often abide by them unconsciously (Zucker, 1983), and these institutional aspects form a culturally supported and conceptually correct basis of legitimacy that becomes unquestioned (Hoffman, 1999).

According to research, cognitive and cultural institutions may influence organizational corruption at the societal level. Empirical evidence has shown that high levels of uncertainty avoidance and masculinity can both lead to a high level of corruption (Getz & Volkema, 2001; Robertson & Watson, 2004).

Research and empirical observations have suggested that the three dimensions of institutions not only directly influence organizational corruption at the societal level, but also interact among themselves, influencing, in turn, the ability of a society to fight corruption. Some authors have pointed out that the differences between the regulatory institutions of Singapore and Hong Kong have much to do with their cultural institutions (Li et al., 2005), and anticorruption regulatory institutions in Singapore and Hong Kong actually match the current characteristics of their societal cognitive and cultural factors. Specifically, whereas the cultural system in Singapore contains many elements of Chinese Confucian and Asian collectivistic values, the system

in Hong Kong consists of mainly Western institutional elements that are based on individualistic cultural values (Li et al., 2002). In other words, whereas Singapore remains a society that is dominated by Confucian cultural values, Hong Kong is actually moving away from Confucianism and becoming an individualistic society. Many recent studies have provided empirical data on this development. For example, Ralston et al. (1993) compared managerial values in mainland China, Hong Kong, and the United States and indicated that, over a period of 10 years, several elements of societal culture had changed among Hong Kong managers. For instance, the scores of these managers in power distance and uncertainty avoidance changed from relatively high to low, which means that there are more similarities in the cultural scores between Hong Kong and the United States than between Hong Kong and mainland China. A more recent study by the GLOBE team among subjects from 61 societies (cf. House et al., 2004) also obtained findings that are consistent with this notion. Hong Kong leaders ranked very high in autonomy and autocracy, for example, whereas their counterparts in other Chinese societies, such as mainland China, Singapore, and Taiwan, ranked significantly lower. Hong Kong managers have also been found to score low in modesty and integrity, which again is significantly different from the situation in other Chinese communities in East Asia (Li et al., 2004). In contrast, the societal culture in Singapore has remained basically unchanged, and Confucianism is still the most salient characteristic of its culture (Li et al., 2002).

Empirical observations in Hong Kong and Singapore have also found this change. For example, there has been fierce resistance among government employees recently in Hong Kong against cuts to their income and benefits, which are necessary to control the territory's huge financial deficits. Such resistance has never occurred in Singapore, even when the Singaporean government actually asked its people to make a greater sacrifice after the 1997 Asian financial crisis.

In summary, the cases of Hong Kong and Singapore suggest two types of interactions among the institutional pillars or dimensions. On the one hand, the cognitive-cultural dimension interacts with the regulative dimension of social institutions. In a society that holds Confucian cultural values, for

example, a set of regulative institutions that emphasizes collectivistic interests and ignores individual interests is more likely to be accepted. This explains why the regulatory institutions fighting corruption in Singapore have met with many fewer legal challenges from individuals than their counterparts in Hong Kong. On the other hand, the cognitive-cultural dimension also interacts with the normative dimension of social institutions. Again in a society that holds Confucian cultural values, a set of normative institutions, such as governmental intervention in economic and social life, is more likely to be accepted. This explains, at least partly, the high level of governmental intervention in most East Asian societies except for Hong Kong. It is arguable whether these interactions affect the effectiveness of a society in its struggle against corruption, which is the issue that we are studying in what follows.

Hypotheses

From the literature that has been reviewed, several hypotheses can be proposed for testing the interactions between social institutions and their effects on organizational corruption at the societal level. First, we predict that the regulative pillar interacts with the normative pillar of social institutions. For example, the regulatory effectiveness of a government may interact with governmental intervention, which in turn helps to control organizational corruption. Previous research suggests, but has not been verified empirically, that an effective government with a low level of governmental intervention is the best combination to fight corruption, whereas an ineffective government that ignores the rule of law and heavily intervenes in economic activities is likely to be the worst combination in controlling corruption at the societal level (Tippee, 1998).

Hypothesis 1: There is a negative relationship between the interaction of the regulatory effectiveness of government and low governmental intervention on the one hand and organizational corruption at the societal level on the other.

Second, the regulative pillar interacts with the cognitive-cultural pillar. Specifically, the regulatory

effectiveness of government may interact with the culture of a society, which in turn influences the level of corruption in the society. For example, the regulatory effectiveness of government may interact with uncertainty avoidance in that a high level of governmental effectiveness and a low level of uncertainty avoidance will help to reduce corruption at the societal level. Conversely, a low level of governmental effectiveness and a high level of uncertainty avoidance may lead to an increase in corruption at the societal level (cf. Husted, 1999; Robertson & Watson, 2004).

Hypothesis 2a: There is a negative relationship between the interaction of the regulatory effectiveness of government and a low level of uncertainty avoidance on the one hand and organizational corruption at the societal level on the other.

Similarly, as research has shown a similar effect of masculinity on corruption (cf. Husted, 1999; Robertson & Watson, 2004), we predict the following.

Hypothesis 2b: There is a negative relationship between the interaction of the regulatory effectiveness of government and a low level of masculinity on the one hand, and organizational corruption at the societal level on the other.

Finally, research has shown that foreign direct investment (FDI) has an effect on organizational corruption at the societal level (e.g., Robertson & Watson, 2004). It would therefore be of interest to test the moderating effect of this factor, because FDI may also interact with social institutions in a given society. On the one hand, the inflow of FDI may be affected by institutions in a society. For example, the more the regulatory institutions in a society become compatible with international business standards, the more likely it is that the society will attract FDI. On the other hand, the inflow of FDI may also lead to changes in local social institutions. For example, as international investors become more concerned about such issues as corruption and corporate social responsibility, they may try to influence local governments to change the regulative institutions in their host countries. Accordingly, we predict the following.

Hypothesis 3: There is a negative relationship between the proportion of FDI in an economy and organizational corruption at the societal level.

Method

Sample and measures

The sample of this study consists of all the countries or societies that were covered by the CPI between 1995 and 2002. This index scores the level of corruption in societies each year on a scale of 0–10. The higher the score is, the lower is the level of corruption in the society. To make the research findings more intuitive and easier to understand, we adopted the approach of previous research (Husted, 1999; Robertson & Watson, 2004) of inverting the scores in the scale by subtracting the score of each society from 10. Thus, the higher the CPI score is, the higher is the perceived level of corruption in a society.

To test the hypotheses, we also collected data from other sources. Specifically, the score for *FDI as a percentage of GDP* was obtained from the World Development Indicators (2005) dataset. *Governmental intervention* was measured by data from a survey conducted by Freedom House (2005) that rated governmental intervention on a scale of 1–7, with the lowest number representing the least governmental intervention. Again, to make the research findings more intuitive and easier to understand, we inverted the scale by subtracting the score for each society from 7. The data for *governmental effectiveness* came from the World Bank Policy Research Department (Kaufmann, 2005), and was tested using a scale that ranged from −3 to +3. The higher the score for a country or a society is, the more effective

is its government. To make the scale more consistent with the other scales in this study, we added seven to each society's score so that all of the scores became larger than 0. Finally, the data on *cultural values* were taken from the GLOBE study, which is the latest and most comprehensive cross-national study on cultural values (see House, 2001). Assuming that cultural values do not change every year, we adopted the measures of uncertainty avoidance and masculinity from the dataset of the GLOBE study. All of the cultural values were measured on a 7-point Likert scale, with a high score representing a high level of uncertainty avoidance or masculinity. To make the research findings more intuitive when testing the effects of interaction, we also inverted the scale by subtracting the scores for each society from 7. Table I provides a summary of all the data and sources.

Data analysis

Cox regression (proportional hazards regression) was adopted to test the hypotheses. The Cox regression approach was first developed for the biological sciences. In recent years, it has been adopted by social scientists to explore a variety of phenomena. A major advantage of this approach over ordinary regressions is that it can process cross-sectional data while explicitly considering the timing of changes (Carroll, 1983; Tolbert & Zucker, 1983). Since our dataset consists of data from 1995 to 2002, we believe that Cox regression is the most appropriate approach for processing the data.

Before conducting the Cox regressions, we first checked whether there is any multicollinearity error among the predictor variables. We found no

TABLE I

Data source

CPI	Transparency International (http://www.transparency.de)
Measures of cultural value	The GLOBE study of 62 countries on culture and leadership (see House, 2001)
Governmental effectiveness	Kaufmann et al. (2005) Governance Matters IV: Governance Indicators for 1996–2004. World Bank Policy Research Department Working Paper. Draft, May 2005
Governmental intervention	Freedom House (2005) Survey of Press Freedom – Ranking 1994–2004
GDP per capita	World Development Indicators (2005)
FDI as % of GDP	World Development Indicators (2005)

significant correlations among the variables that were actually collected from different sources, which showed that multicollinearity error is not a problem.

In the Cox regressions that were conducted in this study, the status variable (the dependent variable) is the case in which a given society in a given year obtained an inverted CPI score of greater than 5. In other words, this score suggests that year saw a high level of organizational corruption in that society. The years were entered as the time variable, and four local environmental factors were entered first as covariates (independent variables) in Model 1: governmental effectiveness, governmental intervention, uncertainty avoidance (UAI), and masculinity (MAS). The interaction factors, including the interaction between governmental effectiveness and governmental intervention (INGG), the interaction between governmental effectiveness and uncertainty avoidance (INGU), and the interaction between governmental

effectiveness and masculinity (INGM), were then entered in Model 2. The data on FDI were later added (Model 3).

Results

Table II shows the results of the Cox regression. Since data were missing, the sample size in the regression was only 346. However, all three models were significant (overall sig. $< = 0.000$), although the change in the χ^2 from the previous step in Model 3 was only marginally significant. We discuss the major findings from the three regression models below.

First, the effect of the normative institution (governmental intervention) was insignificant in Model 1, and the direction of the effect suggests a negative relationship between intervention and

TABLE II

What affected corruption, 1995–2003 ($N = 346$)

Cox regression	B	SE	Wald	df	Sig.	Exp (B)	−2 logl	Model χ^2	Change in χ^2
Model 1					0.000		1402.823	131.346	
Govt. intervention	−0.008	0.135	0.004	1	0.952	0.992			
Govt. effectiveness	−0.983	0.157	39.306	1	0.000	0.374			
UAI	0.325	0.231	1.969	1	0.161	1.384			
MAS	0.532	0.216	6.072	1	0.014	1.703			
Model 2					0.000		1368.744	131.771	34.079★★★(Sig. = .000)
Govt. intervention	2.740	1.215	5.083	1	0.024	15.479			
Govt. effectiveness	−10.630	2.899	13.449	1	0.000	0.000			
UAI	−12.775	2.818	20.552	1	0.000	0.000			
MAS	−6.315	3.204	3.885	1	0.049	0.002			
INGG	−0.392	0.170	5.294	1	0.021	0.676			
INGU	1.783	0.388	21.069	1	0.000	5.947			
INGM	0.871	0.433	4.054	1	0.044	2.390			
Model 3					0.000		1365.022	132.607	3.722 (Sig. = .054)
Govt. intervention	2.392	1.256	3.627	1	0.057	10.940			
Govt. effectiveness	−9.614	2.923	10.814	1	0.001	0.000			
UAI	−11.348	2.873	15.607	1	0.000	0.000			
MAS	−5.970	3.202	3.476	1	0.062	0.003			
INGG	−0.347	0.176	3.895	1	0.048	0.707			
INGU	1.581	0.396	15.908	1	0.000	4.860			
INGM	0.810	0.434	3.481	1	0.062	2.247			
FDI	−0.062	0.037	2.733	1	0.098	0.940			

Note: ★$p < 0.05$; ★★$p < 0.01$; ★★★$p < 0.001$

corruption at the societal level. However, after the inclusion of the interactions in Model 2, the direction changed and the effect became significant. Finally, after entering the FDI factor in Model 3, the effect of governmental intervention became insignificant again. These results suggest that the effect of governmental intervention is not stable and can be moderated by other social institutions. The effect of the interaction between governmental intervention and governmental effectiveness was significant in both Model 2 and Model 3, which supports Hypothesis 1.

Second, the effect of the regulative factor (the effectiveness of governmental regulation) was supported. Specifically, governmental effectiveness was shown to have a stable, negative effect on social corruption across the three models. However, the effect of the interactions between governmental effectiveness and uncertainty avoidance was in a positive direction in Model 3, which suggests that a high level of governmental effectiveness and a low level of uncertainty avoidance are more likely to cause a high level of corruption than a high level of governmental effectiveness and other cultural values. This result is inconsistent with previous research on cultural values, which suggests that a high level of uncertainty avoidance causes a high level of corruption (Husted, 1999; Robertson & Watson, 2004). We discuss this issue further in the next section.

Third, the data suggest that the effects of cognitive-cultural factors, that is, the values of uncertainty avoidance (UAI) and masculinity (MAS), are not stable either. Specifically, the effect of uncertainty avoidance was not significant in Model 1, but after the inclusion of the interactions and FDI, the negative effect of uncertainty avoidance remained stable in Models 2 and 3, which is consistent with the findings of previous research (Husted, 1999; Robertson & Watson, 2004). However, the effect of masculinity was not significant in Model 3, although the direction of its effect still suggests a positive relationship between MAS and corruption, which is also consistent with previous research (Husted, 1999; Robertson & Watson, 2004).

Finally, Table II shows no significant evidence to support the effects of FDI on organizational corruption at the societal level. Moreover, after the

entry of this factor in Model 3, the change in the χ^2 value was only marginally significant.

Discussion and implications

Few studies have tested the interactions among social institutions and their effect on organizational corruption. A test of these interactions, such as that in this study, can improve our understanding of the effects of social institutions on individual and organizational actions. In this section, we discuss several interesting findings from this test.

First, the effect of governmental intervention, as a normative institution, is shown to be unstable. Specifically, although Model 1 of the Cox regressions shows an insignificant and negative relationship between governmental intervention and corruption, the direction of the effect changed after the inclusion of the interactive factors in Model 2. The positive and significant effect of the interactions in Model 2 actually suggests that more governmental intervention may help to control corruption. However, in Model 3, this effect became insignificant again when the FDI factor was controlled. These findings suggest that the effect of governmental intervention on organizational corruption may be moderated by other institutional or environmental factors, such as the effectiveness of government and the presence of FDI in a society. As Table II suggests, the interaction between governmental interaction and governmental effectiveness has a stable and significant effect (see Models 2 and 3 in Table II), which suggests that low governmental intervention and high governmental regulatory effectiveness may be the best combination of social institutions in the struggle against corruption. This result also suggests that, without an effective government, low governmental intervention alone may not be sufficient to control corruption. This assertion can be backed up by empirical observations of the struggles against corruption in Hong Kong, Singapore, and other countries. For example, many developing societies may have a low level of governmental intervention in economic activities, but without an effective regulatory institution or government, these societies often suffer from a high level of organizational corruption.

Consistent with this argument, the results in this study also show that the negative relationship between governmental effectiveness and corruption remains stable across all three of the models that were tested (see Table II). This indicates the relative importance of governmental regulatory effectiveness in fighting corruption. Countries or societies may have a high level of governmental intervention, as is the case in Singapore, or a low level of governmental intervention, as is the case in Hong Kong, yet with an effective regulatory institution or government that is committed to fighting corruption, these societies are still able to obtain a very good anti-corruption score (CPI score).

The same is true for the cognitive-cultural institutions. The unstable effects of the two cultural values that were tested in this study suggest that the relationship between the cultural factors and organizational corruption at the societal level may be moderated by other institutional pillars or factors, such as the regulatory effectiveness of the government. Taking the value of uncertainty avoidance as an example, it can be seen that the numbers in Models 2 and 3 (Table II) actually suggest that although a high level of uncertainty avoidance is associated with a high level of corruption (as past research has suggested), the combination of a high level of uncertainty avoidance and effective regulatory institution actually leads to a lower level of corruption than the combination of a low level of uncertainty avoidance and an effective regulatory institution. This result is interesting, because it suggests that regardless of the cultural differences among countries or societies across the world, all societies can keep organizational corruption at a low level with the right combination of regulative and cognitive-cultural institutions. On this issue our findings are inconsistent with previous research, which has suggested that some cultural values, such as uncertainty avoidance and masculinity, always have a positive relationship with the level of corruption. In fact, looking at the CPI corruption scores over the years, one can easily see that societies with different cultural values can perform well in their struggles against organizational corruption. Accordingly, it is arguable that, as far as their effects on corruption are concerned, cultural values may only be secondary factors, because their effects are unstable and can easily be moderated by other dimensions or pillars of social institutions.

The results of this study seem to suggest that different combinations of institutional pillars may have the same effects and the same legitimacy in relation to such activities as the struggle against corruption. The interactions among the three institutional pillars generate this legitimacy in a given society. Taking the social institutions in Singapore and Hong Kong as an example, it can be seen that the institutions comprise different combinations of the institutional pillars, which means that there are differences among all three dimensions or pillars between the two societies. For example, in its regulatory institutions, the Singaporean government has never been challenged by the country's legal system or parliament, whereas the government in Hong Kong has much less regulatory power, because the legal system and parliamentary institutions in Hong Kong often make the government's decisions unconstitutional or cause them to be rejected by legislators.

Similarly, there are also significant differences in the normative and cognitive-cultural pillars of Hong Kong and Singapore. Regarding the normative pillar, for example, the professional norm of the Singaporean media is to support their government, whereas the professional norm of Hong Kong is to criticize the government. Further, Singaporean firms consider heavy governmental intervention to be normal, whereas Hong Kong firms are likely to take legal action against the government when they encounter a low level of governmental intervention (Li & Karakowsky, 2002).

Similar significant differences also exist in the cognitive-cultural pillars of the two societies. The societal culture in Singapore has more institutional elements from Confucian societies, whereas that of Hong Kong has fewer Confucian elements and more elements from the West, such as the valuing of democracy, freedom, and human rights. Many recent studies have documented these differences (Li & Karakowsky, 2002; Ralston et al., 1993).

However, in spite of the differences in these institutional pillars, both societies scored very high on the CPI index, and the combination of social institutions in both societies has maintained its legitimacy for decades. Here, the interactions among the different institutional pillars or dimensions and the interactions between the institutions and other environmental factors seem to explain the legitimacy

and effectiveness of the institutions in both societies. It is because of these interactions that different combinations of institutional pillars or elements sometimes have the same effects on individual and organizational behavior.

Implications and future research

The results of this study highlight the importance of understanding the interactions among the three institutional pillars and their effects on organizational corruption. According to some recent research on institutional theory, institutional elements from different cultures and different societies can coexist in a given society. For instance, Stark (1996) provided evidence to show that the institutional changes in formerly Communist countries took place "not on the ruins but with the ruins of communism." In other words, these changes are "not replacements but re-combinations" (1996, p. 995) of pre-existing institutional elements and other institutional elements from the West. Other researchers have made similar observations (Campbell & Pedersen, 1996). According to the findings of this study, it is the joint effects or interactions of these institutional elements that often significantly influence the level of corruption in a society. However, many of the issues that surround the coexistence and interactions of these elements remain unclear, such as whether there is a single best combination of social institutions across countries or societies that would enable societies to take the most effective stance against corruption. If there is indeed such a pattern, then the solution to the problem of corruption throughout the world should lie in the identification and promotion of this pattern, which might include such institutional elements as low governmental intervention and a low level of uncertainty avoidance. However, if no such pattern exists, then researchers should adopt a contingency approach and study the way in which the environmental factors in a society interact with each other and influence the level of corruption in that society. More studies are needed to improve our understanding of this issue.

Another related issue is to study how human activities, such as the activities of multinational enterprises, influence social institutions in their host countries. Empirical observations have suggested this influence. For example, in the East Asian societies that

have attracted large amounts of overseas investment, such as Hong Kong and Singapore, one can observe that the social institutions are changing through the integration of Western institutional elements into the local institutions. As a result of this integration, these societies have improved their regulatory effectiveness and increased their capability to fight corruption.

However, as we have suggested, there are different ways to integrate, which is true even among societies that share very similar historical and cultural backgrounds, such as Hong Kong and Singapore. Future studies should identify the processes or factors that contribute to the success of this integration.

Implications for practitioners

The results of this study suggest that social institutions should never be ignored in the struggle against organizational corruption. Social institutions influence both organizational culture and other dimensions of organization design, and organizations, especially multinational enterprises, can and should take an active part in influencing the social institutions in their host countries, which is essential if they are to maintain a high level of integrity among their employees.

The findings of this study also reveal that social institutions in a given society interact with each other, and that as a result of these interactions some environmental or institutional factors, such as governmental intervention or a low level of uncertainly avoidance, do not really have a consistent effect on the level of corruption across societies. Thus, if multinational enterprises are seeking an location for investment with a low level of corruption, they should consider the interactions of social institutions and pay more attention to the factors that have stable effects. According to our study, the most stable factor that they should consider is the regulatory effectiveness of the local government.

References

Acemoglu, D. and T. Verdier: 2000, 'The Choice between Market Failures and Corruption', *The American Economic Review* **90**, 194–211.

Campbell, J. L. and O. K. Pedersen: 1996, *Legacies of Change: Transformations of Postcommunist European Economies* (Aldine de Gruyter, NY) pp. 112–139.

Carroll, G.: 1983, 'Dynamic Analysis of Discrete Dependent Variables: A Didactic Essay', *Quality and Quantity: A European-American Journal of Methodology* **17**, 425–460.

Dacin, T. M., J. Goodstein and W. R. Scott: 2002, 'Institutional Theory and Institutional Change: Introduction to the Special Research Forum', *Academy of Management Journal* **45**(1), 45–57.

DiMaggio, P.: 1988, 'Interest and Agency in Institutional Theory', in L. G. Zucker (ed.), *Institutional Patterns and Organizations: Culture and Environments* (Ballinger, Cambridge, MA), pp. 3–21.

DiMaggio, P. and W. Powell: 1991, 'Introduction', in W. Powell and P. DiMaggio (eds.), *The New Institutionalism in Organizational Analysis* (University of Chicago Press, Chicago), pp. 1–38.

Fong, P., C. Tan and S. Chen: 1989, 'The Management of the People', in K. Sandhu and P. Wheatley (eds.), *Management of Success: The Molding of Modern Singapore* (Institute of Southeast Asian Studies, Singapore), pp. 125–135.

Freedom House: 2005, ''Freedom House Survey of Press Freedom – Ranking 1994–2004'' [www document]: http://www.freedomhouse.org/research/pressurvey. htm (accessed June 2005).

Getz, K. A. and R. J. Volkema: 2001, 'Culture, Perceived Corruption, and Economics', *Business & Society* **40**, 7–30.

Hirsch, P.: 1997, 'Sociology without Social Structure: Neoinstitutional Theory Meets Brave New World', *American Journal of Sociology* **102**(6), 1702–1723.

Hoffman, A. J.: 1999, 'Institutional Evolution and Change: Environmentalism and the U.S. Chemical Industry', *Academy of Management Journal* **42**(4), 351–371.

Hofstede, G.: 1980, *Cultural Consequences: International Differences in Work Related Values* (Sage, Beverly Hills, CA) pp. 311–399.

House, R.: 2001, *Global Studies of Managerial Cultures of the World* (Sage Publications, NY) pp. 3–39.

House, R. J., P. J. Hanges, M. Javidan, P. W. Dorfman and V. Gupta: 2004, *Culture, Leadership and Organizations, the GLOBE Study of 62 Societies* (Sage Publications, Thousand Oaks, NY) pp. 27–57.

Husted, B. W: 1999, 'World, Culture, and Corruption', *Journal of International Business Studies* **30**, 339–360.

ICAC: 1999, *Fighting Corruption – the Mission Continues* (Independent Commission against Corruption, Hong Kong Special Administrative Region, China).

Jones, D.: 1999, 'Public Administration in Singapore: Continuity and Reform', in H. Wong and H. Chan (eds.), *Handbook of Comparative Public Administration in the Asia-Pacific Basin* (Marcel Dekker, Inc, New York), pp. 1–22.

Kaufmann, D., et al.: (2005) 'Governance Matters IV: Governance Indicators for 1996–2004' (World Bank Policy Research Department Working Paper. Draft, May 2005, NY).

Kim, J. B.: 1999, 'Combating International Corruption: In Search of an Effective Role for ASEM', in W. Stokhof and P. V. Velde (eds.), *ASEM: A Window of Opportunity* (Kegan Paul International, London), pp. 84–94.

Lee, M. Q. C.: 1995, 'Business and the Rule of Law in Hong Kong', *Columbia Journal of World Business* **30**, 28–32.

Li, J. and L. Karakowsky: 2002, 'Cultural Malleability in an East Asian Context: An Illustration of the Relationship between Government Policy, National Culture and Firm Behaviour', *Administration and Society* **34**(2), 176–188.

Li, J., P. P. Fu, I. Chow and T. K. Peng: 2002, 'Societal Development and the Change of Leadership Style in Oriental Chinese Societies', *Journal of Developing Societies* **25**, 46–63.

Li, J., P. P. Fu, I. Chow and T. K. Peng: 2004, 'Reconsider Cross-Cultural Differences in Leadership Behaviours: A Perspective of Institutional Symbiosis,' Working Paper, Series No. HRSWP 200403 (School of Business, Institute for Enterprise, Hong Kong Baptist University, Hong Kong), pp. 21–39.

Li, J., V. W. M. Luk, R. K. Chiu and A. S. M. Leung: 2005, 'Social Institutions and the Anti-Corruption Struggle: A Tale of Two Asian Cities,' Working Paper, Series No. HRSWP 200501 (School of Business, Institute for Enterprise Development and Management Research (IEDMR), Hong Kong Baptist University, Hong Kong), pp. 33–62.

March, J.: 1981, 'Decisions in Organizations and Theories of Choice', in A. VenVan de and W. Joyce (eds.), *Perspectives on Organizational Design and Behavior* (Wiley, NY), pp. 19–75.

Mbaku, J. M.: 1999, 'Corruption Cleanups in Developing Societies: The Public Choice Perspective', *International Journal of Public Administration* **22**(2), 309–346.

Meyer, J. W. and W. R. Scott: 1992, *Organizational Environments: Ritual and Rationality* (Sage, Beverly Hills, CA) pp. 81–112.

Murir, K. A.: 2002, 'Being Different: How Normative and Cognitive Aspects of Institutional Environments Influence Technology Transfer', *Human Relations* **55**(12), 1403–1433.

Quah, J. S. T.: 1999, 'Corruption in Asian Countries, Can it be Minimized?', *Public Administration Review* **59**(6), 483–494.

Ralston, D. A., D. J. Gustafson, F. M. Cheung and R. H. Terpstra: 1993, 'Differences in Managerial Values: A Study of U.S., Hong Kong and PRC Managers', *Journal of International Business Studies* **24**, 249–275.

Robertson, C. J. and A. Watson: 2004, 'Corruption and Change: The Impact of Foreign Direct Investment', *Strategic Management Journal* **25**(4), 385–396.

Russo, M.: 2003, 'The Emergence of Sustainable Industries: Building on Natural Capital', *Strategic Management Journal* **24**(4), 317–338.

Scott, W. R.: 1995, *Institutions and Organizations* (Sage, London) pp. 31–52.

Scott, W. R.: 2001, *Institutions and Organizations* (Sage, London) pp. 111–152.

Stark, D.: 1996, 'Recombinant Property in East European Capitalism', *American Journal of Sociology* **101**(4), 993–1027.

Tippee, B.: 1998, 'Growing Attention to Corruption Forces Companies to Deal with Sensitive Issue', *Oil & Gas Journal* **96**, 57–63.

Tolbert, P. S. and L. G. Zucker: 1983, 'Institutional Sources of Change in the Formal Structure of Organizations: The Diffusion of Civil Service Reform, 1880–1935', *Administrative Science Quarterly* **28**(1), 22–39.

Wilhelm, P. G.: 2002, 'International Validation of the Corruption Perceptions Index: Implications for Business Ethics and Entrepreneurship Education', *Journal of Business Ethics* **35**(3), 177–189.

World Development Indicators: 2005, *International Bank for Reconstruction and Development* (World Bank Group, Washington DC).

Zucker, L.: 1983, 'Organizations as Institutions', in S. Bacharach (ed.), *Research in the Sociology of Organizations* (JAI Press, Greenwich, CT), pp. 1–47.

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