Determinants of Bribery in International Business

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Executive Summary

Levels of perceived bribe taking in 54 countries in two time periods were analyzed with respect to two independent variables—their level of human development measuring education, wealth, and health (Human Development Index) and the level of economic freedom measuring the extent to which a nation's economy is open to market forces. The results indicate that lower levels of bribe taking are associated with high human development and greater economic freedom. Developed countries that have shown improvements on the two variables over a five-year period also show a reduction in their perceived levels of bribe taking. © 2004 Wiley Periodicals, Inc.

Bribery in international business has emerged as a major public policy issue around the world. Bribing public officials to obtain business contracts and favors is now recognized as a social evil that inhibits economic development, distorts competition, misallocates resources, undermines market efficiency and predictability, and endangers democratic and moral values (Lambsdorff, 1998). One of the most sinister features of bribery is its corrosive effect on the public's respect for the rule of law, and, therefore, on the structure and stability of society (Mauro, 1995).

The enormous growth in international trade and investment over the past 50 years has been accompanied by an increase in bribery. The World Bank estimated that 5% of exports to developing countries go to corrupt officials (Moss, 1997). The chairman of the U.S. branch of Transparency International, a nongovernmental organization dedicated to combating corruption, has noted that many analysts feel "there has been a gradual escalation. At one point, five percent (of a contract price) was standard. That's crept up gradually until now it's in the twenty to thirty percent

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range" (Andelman, 1998). If bribery is a burden to international firms, it is even more costly to the countries where they are prevalent. It has been estimated that money lost to corruption is the largest potential source of funding available to many new democratic governments aside from foreign direct investment (Hamra, 2000).

Many businesses have become conscious of their ethical conduct and the need to comply with the emerging web of laws.

The seriousness of the issue has prompted governments, intergovernmental bodies, nongovernmental organizations, and business firms to adopt measures to control and discourage bribe giving and bribe taking. In 1977, the United States enacted the Foreign Corrupt Practices Act, which made it a crime for any American firm (and foreign firms that issue negotiable securities on U.S. stock exchanges) to offer, promise, or make payments or gifts of anything of value to foreign officials, politicians, and political parties with the intention of changing policies or securing the suspension of a legal norm (Pitman & Sanford, 1994). In 1998, member countries of the Organisation for Economic Co-operation and Development (OECD) and five other nations signed the Convention on Combating Bribery of Foreign Public Officials in International Business. The main goals of the treaty are to prevent bribery in international business transactions by requiring countries to make it a criminal offense to bribe a foreign public official, to have in place adequate sanctions and reliable means for detecting and punishing offenses, and prohibit bribes from being considered a business expense and thus tax deductible (Andelman, 1998). In 1996, 25 countries in North and South America adopted the Inter-American Convention against Corruption (for more information, go to http://www.oas.org/oasnews). The Convention requires signatory countries to enact laws criminalizing certain activities, including the acceptance or solicitation of bribes by public officials, and allow the extradition of corrupt officials to other countries for prosecution.

Financial agencies such as the World Bank, the Asian Development Bank, and the International Monetary Fund have linked aid disbursements to improvements in administrative practices to eliminate corruption (Lewis, 1997; Rose-Ackerman, 1997). Nongovernmental organizations such as Transparency International, through its annual rankings of perceived bribe taking and bribe giving among countries, focus on this subject. Many businesses have become conscious of their ethical conduct and the need to comply with the emerging web of laws. Consequently, they have created codes of conduct for their employees. Private sector bodies such as the Business and Industry Advisory Committee to the OECD and the International Chamber of Commerce have developed anti-bribery programs (Yannaca-Small,

1995). Thus, there have been worldwide efforts to address both the demand for and supply of bribes.

Studies indicate that incidences of bribery are likely to be higher in certain countries. Empirical work on identifying the determinants of bribery and explaining its variation across countries is relatively new and limited. This article builds on existing studies and offers additional explanations for the prevalence of bribery across countries. Note that this article looks at the demand side of bribes—why bribes are accepted. It does not study why bribes are offered, though it is recognized that both are interrelated.

Bribery tends to occur more often in less developed countries, especially those with a recent colonial past.

NATURE AND DETERMINANTS OF BRIBERY

Bribery is defined as "the offering, promising or giving something in order to influence a public official in the execution of his/her official duties" ("The Fight against Bribery and Corruption," 2000). Bribes can take the form of money, other pecuniary advantages, such as scholarship for a child's college education, or nonpecuniary benefits, such as favorable publicity. In the international context, bribery involves a business firm from country A offering financial or nonfinancial inducements to officials of country B to obtain a commercial benefit.

Bribery tends to occur more often in less developed countries, especially those with a recent colonial past. Theobald (1990) believes that in these countries the full bureaucratic apparatus of the modern state has been introduced with little regard for the limited capacity of the economy to sustain it. Government officials have heavy responsibilities and much social status but their salaries are often very low in comparison to their social and familial obligations. The need to maintain status and the heavy burden of traditional obligations encourage corrupt behaviors. Thus, corruption is the result of a combination of opportunity (that comes from the office being held) and personal and familial obligations. In addition, the high cost of enforcing rules relative to the available resources as well as the reluctance of people in power to prosecute corrupt acts (being corrupt themselves) allows such behaviors to persist.

Countries experiencing radical economic and political changes (e.g., Russia and Eastern Europe following the collapse of the communist system), where the established legal and social order breaks down, experience uncertainty, which in turn, spawns corrupt behaviors

(Ades & di Tella, 1996). Leiken (1996) has argued that in these countries, democracy and free press have led to disclosures of corruption and that the spread of democracy and market-based economic policies have increased both the opportunities for graft and the likelihood of exposure.

Uncertainty avoidance moderated the relationship between economic adversity and corruption.

Bribery in international business is one manifestation of the larger phenomenon of corruption, which is broadly defined as the misuse of public office for private gain. Mauro (1995) has noted that high levels of corruption are likely to impede investment and growth in a country. Treisman (2000) reported that countries with Protestant traditions, history of British rule, a more developed economy, and a possible higher level of imports as a proportion of their gross domestic product were less likely to be corrupt. In contrast, federal states were more corrupt, and while the degree of democracy was not significant, long exposure to democracy predicted lower corruption. However, the focus of this article is narrower—it seeks to examine factors associated with bribe taking in the context of conducting international business; it does not look at overall societal corruption, though there is no effort to deny that these issues may be related.

Transparency International, based in Berlin, Germany, produces annually its list of countries ranked on the basis of how corrupt (in terms of bribery) they are perceived to be. These rankings and individual country scores, called the Corruption Perception Index (CPI), have served to draw attention to the issue of bribery in international business. These scores have been used by scholars to empirically ascertain patterns and relationships with other variables to understand corruption in general and bribery in particular.

Husted (1999) examined the role of economic and cultural variables and found that a significant relationship existed between perceived levels of corruption in a country and the per capita GNP income in purchasing power parity terms. Cultural dimensions—using Hofstede's (1980) classification—of uncertainty avoidance, masculinity, and power distance were significant factors. Sanyal and Samanta (2002) also found that both economic and cultural factors were significantly related to the CPI. Per capita income and income distribution in a country were the two economic factors and power distance, masculinity, and uncertainty avoidance were the cultural factors. Similarly, Getz and Volkema (2001) also found that corruption in a country was related to wealth and so was power distance and uncertainty avoidance. Uncertainty avoidance moderated the relationship between economic adversity and corruption. Thus, there is an

empirical basis to suggest that certain economic and cultural factors determine perceived levels of corruption and these factors are summarized in Table 1. All three studies found that per capita income was inversely related to corruption. Power distance, masculinity, and uncertainty avoidance were positively correlated with corruption.

All these studies have substantially increased the understanding of the factors associated with bribery in international business and provided the basis for the formulation of both public policy and corporate behaviors to reduce and eliminate graft. This article seeks to identify additional factors that are related to bribery and provide a fuller understanding of the dynamics behind the economic factor of per capita income.

RESEARCH PROPOSITIONS

Based on the results of prior research, it appears that bribery in international business occurs as a result of the interaction of three key variables—economic conditions, cultural factors, and social changes. While low per capita income has been associated with high levels of bribery, it is economic policies pursued by individual government that contribute to a great extent to a country's income levels. Economic policies cover a wide range of subjects but together they create conditions in which business activities either flourish or flounder. It can be suggested that on the whole, policies that encourage inward foreign investment, low inflation levels, robust tax revenues, stable banking and financial systems, an open trade regime, legal protection of property rights, and limited government regulation of the economy, among others, foster a higher level of economic activity and, thus, increase income levels. Conversely, inward-looking policies, profligate public spending, and the absence of rule-based decision making, among others, discourage investment and economic activity and consequently tend to depress

Table 1. Determinants of Bribery across Countries

Economic Factors	Cultural Factors	Social Change Factors
Per capita income (PPP) (Husted, 1999; Getz & Volkema, 2001; Sanyal & Samanta, 2002)	Power distance Masculinity Uncertainty Avoidance (Husted, 1999; Getz & Volkema, 2001; Sanyal & Samanta, 2002)	Newly independent countries (Theobald, 1990) Economies in transition (Ades & di Tella, 1996; Leiken, 1996)
Income distribution (Sanyal & Samanta, 2002)		

income and wages. Current research on bribery in international business has tended to focus on the narrow and single indicator of per capita income to the exclusion of other relevant economic variables. Studies report an inverse relationship between bribe taking and per capita income levels.

The value of education goes hand-in-hand with good health.

The ability of the economy to grow is also dependent on the literacy level of the people of the country and the extent to which the population enrolls in formal schooling at the primary, secondary, and college levels. An educated population and workforce can participate productively in high value-added economic activities. In such circumstances, the population may be better placed to understand the deleterious effects of bribery on a society and thus more likely to shun and proscribe such conduct. Ettorre (1994) has argued that the strongest opposition to graft comes from the emerging middle class in many countries. The value of education goes hand-in-hand with good health. An unhealthy and sick workforce can hardly be expected to be productive and is more likely to drain resources away. Thus, sound economic policies coupled with investments in health and education can create conditions of rising prosperity that are likely to reduce the conditions that attract bribe taking and giving. These human development dimensions of a country have not been empirically evaluated as to their relationship with bribery in international business.

Consequently, two principal propositions are advanced:

Proposition 1: Countries that have economic policies that favor market forces, limited government, sound public finances, and a rules-based system are less likely to accept bribes.

Proposition 1a: Based on Proposition 1 it is suggested that countries that change their economic policies to make themselves more "open" rather than "closed" are likely to note a decline in the level of bribe taking over time.

Proposition 2: Countries whose population is highly educated and healthy are likely to take fewer bribes than countries where literacy rates are low and health conditions poor.

Proposition 2a: Based on Proposition 2, it can be suggested that countries where literacy and life expectancy rates rise will experience a decline in the level of bribery over time.

This article sets out to test these propositions.

DATA

This article uses reported data. The research design ascertains the association of bribery in a country as measured by the CPI with two variables: (a) the extent of human development and (b) the extent of economic freedom. Data were obtained for two time periods, the years 1996 and 2001, for 54 countries. The choice of countries was determined by the availability of the appropriate data The two time periods—five years apart—afforded the opportunity to test whether perception of corruption in a country changes over time and the extent to which that is linked to changes in the two variables. The countries in the study include both highly advanced as well as less developed countries. See the Appendix for countries included in this study.

By being a single composite score, the CPI has increased the reliability of the data of each individual source.

The scores of the Corruption Perception Index for each of the countries have been used as a measurement of bribery in a country. The Index is based on a survey of surveys (for more information, see http://www.transparency.org). The number of surveys used for each country range from 4 to 11. The Index is calculated based on data from the Economist Intelligence Unit (Country Risk Service and Country Forecasts), Gallup International, the Institute for Management Development (World Competitiveness Yearbook), the Political and Economic Risk Consultancy in Hong Kong (Asian Intelligence issue), Political Risk Services (International Country Risk Guide), the World Bank (World Development Report and Private Sector Survey), and the World Economic Forum (Global Competitiveness Survey) collected over the previous three years. All these studies have a section on the problem, prevalence, pervasiveness, extent, and the number of cases of corruption in various countries. By being a single composite score, the CPI has increased the reliability of the data of each individual source. While one could have used the scores or rankings provided by several of the surveys used to calculate the CPI, the CPI score is more valid and reliable and best captures the perception of the level of corruption in a country as it affects the international businessperson.

The CPI has gained acceptance among economists, academicians, businesspersons, and the media as a credible measure of corruption. It is widely reported in the media when it is announced annually. It should be noted that CPI scores report perceptions of corruption within countries based on surveys conducted by a variety of organizations. They do not measure actual levels of corruption. The perception is about the extent of corruption among

public officials and politicians in individual countries with respect to conducting business. The CPI does not reflect corruption in the private sector or other forms of corruption (e.g., electoral fraud). Also, given the way the CPI is created, it is possible for perceptions of bribery to go down while perceptions of other forms of corruption might go up.

The CPI is computed on a scale of 10.0 to 0.0. A country rated 10.0 means the country is perceived to be virtually free of bribe taking; a score of 0.0 means the country is perceived as totally corrupt. The CPI for the same group of countries was obtained for two years, 1996 and 2001. Table 2 lists the 10 countries perceived to be least likely to accept bribes.

The Human Development Index (HDI), developed by the United Nations Development Program (UNDP), measures a country's achievements on three broad dimensions: (a) life expectancy, (b) educational attainment (which includes the level of adult literacy and the level of enrollment in primary, secondary, and tertiary educational institutions), and (c) adjusted real income in terms of purchasing power parity in U.S. dollars (Human Development Report, 2001). The data used to calculate the summary index are obtained from a wide range of various government and international agencies. The index ranges from 1.00, which indicates the highest level of human development, to 0.0, which reflects the lowest level of human development. Countries are divided into three categories based on their HDI. High human development reflects a score of 0.800 and above; medium human development is considered as between 0.500 to 0.799; and a score of less than 0.500 is low human development. The HDI for the countries in the study were

Table 2. Corruption Perception Index

1996	Country	Score	2001	Country	Score
	New Zealand	9.43		Finland	9.9
	Denmark	9.33		Denmark	9.5
	Sweden	9.08		New Zealand	9.4
	Finland	9.05		Singapore	9.2
	Canada	8.96		Canada	8.9
	Norway	8.87		The Netherlands	8.8
	Singapore	8.80		Norway	8.6
	Switzerland	8.76		Australia	8.5
	The Netherlands	8.71		Switzerland	8.4
	Australia	8.60		United Kingdom	8.3

Source: Transparency International, Berlin (www.transparency.org).

obtained from the Human Development Report published by the UNDP for the years 1996 and 2001 (the report is available at http://www.undp.org). Given the distribution of the HDI, the research proposition developed earlier would suggest that the HDI will be positively correlated with CPI.

The Economic Freedom Index (EFI), first reported in 1995 and published annually, has been developed by The Heritage Foundation, an American think tank (for more information, see http://www.heritage.org). Countries are rated 1 through 5 on 50 different economic variables grouped into ten categories. A score of 1 reflects maximum economic freedom; five the least. The ten categories of economic variables used to develop the summary index are: banking and finance, capital flows and foreign investment, monetary policy, fiscal burden of government, trade policy, wages and prices, government intervention in the economy, property rights, regulation, and black market activity. EFI scores were obtained for the countries in the study for two years, 1996 and 2001 (O'Driscoll, Holmes, and Kirkpatrick, 2001). Given the distribution of the EFI, the research proposition developed earlier would suggest that the EFI would be negatively correlated with the CPI. As with the other data, the EFI is an index of several variables and, arguably, some could be more important than others. However, it is an overall index measuring the extent of economic freedom in a country and thus can be used as a basis for comparing countries on a composite basis. Summary results of the descriptive data are shown in Table 3.

Table 3. Summary Statistics

Variables	Mean	Minimum	Maximum	Std. Deviation
Corruption Perception Index 2001	5.346	0.4	9.9	2.648
Corruption Perception Index 1996	5.349	0.69	9.43	2.599
Human Development Index 2001	0.797	0.435	0.939	0.146
Human Development Index 1996	0.805	0.34	0.96	0.175
Economic Freedom Index 2001	2.584	1.30	3.85	0.66
Economic Freedom Index 1996	2.649	1.30	3.85	0.613

Note: For the Corruption Perception Index, 0 represents maximum bribery; 10 minimum bribery. For the Human Development Index, 0 represents minimum development, 1 is maximum. For the Economic Freedom Index, 1 represents maximum freedom, 5 is minimum freedom.

ANALYSIS AND RESULTS

Two regression models, one for 1996, the other for 2001, were developed. The regression results (presented in Table 4) indicate that both independent variables, HDI and EFI, were significant, as was the overall model (value of the R square for the 1996 and 2001 models being 0.679 and 0.762, respectively). The signs of the coefficients are as predicted.

The announcement of the CPI draws worldwide attention to individual countries on the list with respect to bribe taking. It is likely that countries ranked low would strive to eliminate the stigma and countries ranked high would work to maintain their more honest image. Thus, the data for 2001 may reflect an *announcement effect* for the 1996 listing. To test whether there is a structural difference between the two regression models, a test for structural changes, known as a classical Chow test, was conducted. The obtained F-statistic value is 3.7802, whereas the critical F-value is 3.07 at 5% level of significance. This indicates the existence of some structural changes over the five-year period. In other words, although the relationship between the CPI and EFI and HDI had changed, both variables were still statistically significant to explain bribe taking. This inference was further corroborated by the panel estimation study reported later on.

Analysis was conducted to determine whether the changes in EFI and HDI scores and their relationship with the country's CPI scores vary between developed and developing countries. The terms *developed* and *developing* are used here not in terms of per capita income alone but as a measure of the level of human development in these countries. A simple dummy variable technique was used for the change in the slope parameter. An HDI score of 0.600 was used as

Table 4. Regression Results

Variable	Coefficient	T statistic	Significance
Year 1996:			
Constant	6.321	3.549	0.000*
Human Development Index	5.916	4.755	0.000*
Economic Freedom Index	–2.165	–5.73	0.000*
Year 2001:			
Constant	2.105	1.007	0.314
Human Development Index	9.448	5.995	0.000*
Economic Freedom Index	–1.659	–4.616	0.000*

* Significant at the 0.05 level.

the cutoff point to separate developed and developing countries. A country with an HDI score equal to or over 0.600 is considered developed, otherwise the classification is developing. This score was selected for several reasons: it includes countries considered to be developed by the United Nations and World Bank; these countries have relatively high per capita incomes; it includes countries with high HDI scores and those in the upper tier of medium HDI scores; and it ensures a balanced sample between developed and developing countries. (Note: A statistical analysis was also performed separating the sample into high HDI countries [0.80 and above] and the rest [less than 0.80] and the results are similar; these results are available from the authors).

The estimation results of this dummy variable regression models are given in Table 5. They indicate that the developed and developing countries as a group differ from each other. In addition, the signs of the estimated coefficients for the EFI dummy (negative) and the

Table 5. Regression Results, Developed and Developing Countries, 1996 and 2001

Variable	Coefficient	T statistic	Significance
Year 1996:			
Constant	2.033	0.76219	0.4459
Human Development Index (Developing)	4.0593	1.3996	0.1616
Economic Freedom Index (Developing)	–0.5014	–0.9059	0.3649
Human Development Index *dummy[1] (Developed)	6.2755	3.3071	0.0009*
Economic Freedom Index *dummy[2] (Developed)	–1.5102	–3.8857	0.0001*
Adjusted R-square: 0.699			
Year 2001:			
Constant	–1.7636	–0.531	0.5953
Human Development Index (Developing)	5.9863	1.5752	0.1152
Economic Freedom Index (Developing)	–0.1470	0.6044	0.8078
Human Development Index *dummy[1] (Developed)	7.4710	3.6302	0.0003*
Economic Freedom Index* *dummy[2] (Developed)	–1.6332	–3.8451	0.0001*
Adjusted R-square 0.7824			

* Significant at the 0.05 level.

[1, 2] These coefficients measure the difference between the developed countries and the developing countries, and the relation between the HDI, EFI, and CPI.

HDI dummy (positive) imply that the role of the HDI and the EFI on the CPI is greater for developed countries than it is for developing countries.

To capture any individual effect that a country may have on its CPI, a set of panel regression models was developed. This regression model uses panel data (or longitudinal data) in which the same cross-section data is sampled over time. Thus, the model, by incorporating information relating to both cross-section and time series, captures the effect of changes (e.g., economic, political, and social) over the time period 1995–2001 on the perception of bribe taking across countries. It, therefore, also substantially diminishes the problem of so-called omitted variables that is encountered in regression analysis. The statistical results of this panel regression models using random effects are given in Table 6. The overall model is significant with an adjusted R square of 0.9708, and both the independent variables are statistically significant.

Estimates of the individual effects for each country were also obtained, and these effects are found to be statistically significant. (The results are not reported here, but may be obtained from the authors).

DISCUSSION

The statistical results provide robust support for the two main propositions advanced above. The results indicate that there is a significant relationship between a country's HDI and EFI and its CPI. The direction of the signs supports the proposition that a country with a high level of human development (HDI) is less likely to be perceived as accepting bribes. Similarly, countries with a high EFI are likely to be perceived as less likely to take bribes. Conversely, countries that are ranked low in human development and where economic freedom is restricted tend to be perceived as more likely to accept bribes.

The results indicate that investments in human capital (education) and health care, and high-income levels create conditions where

Table 6. Effect on Perception of Corruption Using Panel Data

Variable	Coefficient	T statistic	Significance
Constant	5.8865	3.2511	0.0011
Human Development Index	4.032	2.3828	0.0171*
Economic Freedom Index	–1.4416	–4.0285	0.0001*

* Significant at the 0.05 level.

bribery is less likely to occur. (Life expectancy can be seen as a proxy for health care—public health systems, preventive medicine, and medical care contribute to longevity.) The need for extra (illicit) money is probably less and there may be greater awareness among the populace of countries with high HDI about the deleterious effects of bribery on economic, social, and political well-being. It is also possible that income is related to health and education; other studies have indicated that high corruption tends to be associated with low-income countries.

. . . the statistical results provide an optimistic assessment about the incidence of bribery in the future.

Similarly, open economies with policies that welcome foreign investment, protect private property, handle public finances prudently, and limit arbitrary government regulations and interventions, tend to be perceived as having low levels of bribery. In such countries, the rules are transparent, policies are stable, and mechanisms exist to address commercial disputes. The propensity to take bribes is reduced.

There is only partial support for the two secondary propositions that countries that liberalize their economic policies and which show improvement in their HDI over time will have lower CPI. The statistical result indicates that changes in EFI and HDI scores are more likely to be associated with changes in CPI scores for developed countries but not so for developing countries. This finding suggests that other factors, possibly culture-related, play an important and greater role in developing countries than in developed countries. Thus, while increases in EFI and HDI tend to reduce the perception of bribery in developed countries, it does not have the same effect on the CPI of developing countries. However, since developed countries generally tend to have high HDI and tend to be more economically free, it is likely that a certain threshold on these two dimensions must be reached before improvement in those dimensions gets reflected with respect to reduced bribery. Nevertheless, the statistical results provide an optimistic assessment about the incidence of bribery in the future. To the extent countries are able to improve their HDI and EFI over time, the propensity for bribe-taking practices to occur is likely to diminish.

To ascertain whether HDI and EFI are correlated with one another, we tested for presence of multicollinearity in the model. The correlation between these two variables is highly significant for both time periods (1996: $r = -0.66$, $p = 0.00$; 2001: $r = -76$, $p = 0.00$). However, this multicollinearity does not detract from the findings reported here since the objective of this study was to explain bribery in terms of HDI and EFI and not necessarily the individual contributions of these two

variables. However, to account for the impact of multicollinearity, a different estimation method was used, using a two-step procedure. (These results are available from the authors.)

. . . countries with higher HDI and EFI scores tend to be associated with lower perceived levels of bribe taking.

To determine whether there is interdependence among CPI, HDI, and EFI scores, a test of simultaneity (or exogeneity) was also conducted following Hansen's test procedure. The results indicated that HDI is exogeneous for CPI while EFI is an endogeneous variable with respect to CPI for both years. (The critical t-values for endogeneity test for HDI are 0.239 and 0.089, while for EFI the critical t-values are 2.989 and 3.985). This means that the EFI and CPI are simultaneously determined, implying that inclusion of EFI scores in the regression model will not give us unbiased estimators. To address this problem, we re-estimated the CPI equation only with the HDI and the dummies as explanatory variables. This also addresses the multicollinearity issue referred to earlier. The results of this two-stage, least-square estimation support the conclusions presented in Table 5 above about developing and developed countries.

The public policy implications point to the need for sustained improvements in literacy rates, health, and rising incomes, as well as for economic policies that favor market forces, rule-based systems, and prudent public finance management. Developed countries have already achieved much of these and this is also reflected in their being perceived as less corrupt. The challenge is for developing countries to adopt and pursue these policies on a sustained basis. As reported here, countries with higher HDI and EFI scores tend to be associated with lower perceived levels of bribe taking. This suggests the need for national governments, foreign governments, intergovernmental agencies, development banks, and nonprofit organizations to push for increased and sustained investments in education and health care and to promote a global economic order that is open and responsible.

CONCLUSION

The study represents an effort to understand and identify additional determinants of bribery in international business. As data become available for multiple periods of time, more extensive time series analysis will become feasible. Similarly, more countries could be included in the sample. It is also recognized that some of the data used, although reported in a particular year, were collected over a longer time frame. In this study, the cultural variables were not included; other studies noted in the literature review have shown that certain

cultural factors are significantly associated with perception of corruption. Future studies could test a comprehensive model using all the corruption determinants that are being discovered. It is also likely that a measure of corruption will be created that reports actual, rather than perceived, levels of corruption, and if so, research studies would indeed benefit from such a measure in providing a more accurate indication of this phenomenon. Also, this article looked at the demand side of the bribery equation; it did not examine which countries are more likely to be offering (supplying) bribes.

Corruption in international business has become a subject of widespread concern. A large number of initiatives have been adopted by governments, nongovernmental organizations, and international agencies to reduce bribery. This study has indicated that perceived levels of bribery in a country are closely associated with its level of human development and degree of economic freedom. These findings supplement and enhance our understanding of the factors associated with bribery in international business. Developed countries are more likely to be able to reduce corruption when their human development index improves and their economies are open and run ably. As the negative aspects of bribery become apparent, this study provides additional insights into what is associated with this phenomenon and where the keys to its eradication lie.

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APPENDIX

Countries Included in the Study (54)

Argentina	Hungary	South Africa
Australia	India	South Korea
Austria	Indonesia	Spain
Bangladesh	Ireland	Sweden
Belgium	Israel	Switzerland
Bolivia	Italy	Taiwan
Brazil	Japan	Thailand
Cameroon	Jordan	Turkey
Canada	Kenya	Uganda
Chile	Malaysia	United Kingdom
China	Mexico	United States
Colombia	Netherlands	Venezuela
Czech Republic	New Zealand	
Denmark	Nigeria	
Ecuador	Norway	
Egypt	Pakistan	
Finland	Philippines	
France	Poland	
Germany	Portugal	
Greece	Russia	
Hong Kong	Singapore	