Have Multilateral Conventions Lowered Bribery Around the World?

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Corruption is generally defined as the use of public office for private gains (Bardhan 1997). Jain (2001) provides an overview of the agency model of the origin and spread of corruption in an economy. The economy consists of three groups of actors: firms and households, government leaders, and appointed public officials. The firms and households are the principals who are utility/wealth maximizers. They employ two groups of agents: government leaders and public officials. The government leaders formulate the regulatory laws and processes in the country. The appointed public officials interpret, implement, and uphold the regulatory laws and processes. Acceptance of the position of a government leader or appointed public official indicates that the incumbent has agreed that the pay is sufficient reward for his/her effort. The principals' well-being is impacted by actions (or inactions) of their agents.

Firms and households competitively lobby government leaders to align regulations in their favor. They also seek to influence the interpretation and implementation of these regulations by the bureaucracy, judiciary, and law enforcement to get a competitive edge over rivals. Such rent seeking has an efficiency cost for the economy (Tullock 1993, Krueger 1974, Bhagwati 1982). However, as long as it

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is transparent and open (and thereby precludes secret payments to public officials), there is no corruption involved. Corruption occurs when the agents' response to lobbying depends on secret private payments received. The literature labels it *grand or political corruption* when secret payments involve high-level government officials; *legislative corruption* when it involves elected representatives; and *petty, administrative, bureaucratic, or judicial corruption* when administrative or judicial officials are involved. Agency problems can only be resolved by monitoring, which is costly. Complete elimination of corruption, therefore, can be very costly. Indeed, there is scant historical or contemporary evidence of a country where the economy is completely free of corruption.

There is a view that although morally repugnant, corruption may play a useful role. For example, Leff (1964), Huntington (1968), and Leys (1965) argue that in countries burdened with cumbersome economic controls, selective tolerance of corruption is beneficial.[1] In such countries, corruption may "grease the wheels" of the economy so that it is "market expanding," according to Osterfeld (1992: 209). Rose-Ackerman (1997) questions that view and doubts that it is possible to contain corruption at a level where it is "efficient." Meanwhile, Kurer (1993) holds that corrupt officials have an incentive to create more opportunities for bribes. Finally, Murphy, Shleifer, and Vishny (1991) and Pecorino (1992) present the theoretical argument that corruption restricts the growth of an economy. Their view is supported by the empirical evidence in Mauro (1995), Mo (2001), Pelligrini and Gerlagh (2004), Méon and Sekkat (2005), and Swaleheen (2011).

The degree to which public officials in a country have the opportunity to resort to corruption depends on historical and homegrown factors—for example, the colonial past, level of economic development, electoral system, breadth and depth of regulations, decentralization, female participation, trade openness, inflation, and freedom of the press (Treisman 2000, Goel and Nelson 1998, Brunetti and Weder 2003, Swamy et al. 2001), as well as factors that originate in

[1]Aidt (2003) cites the example provided by Leff (1964) of corruption actually benefiting an economy: both Chile and Brazil introduced price controls for food products during a period of high inflation in the early 1960s. Chilean public officials enforced the price controls, which reduced food production. In Brazil, corruption weakened the price controls and food production increased.

other countries (Lambsdorff 1998, Getz 2006, Cuervo-Cazurra 2008). National anticorruption policies typically aim at regulatory and administrative reforms with varying degrees of success.

The focus of this article is on factors that originate in other countries and, therefore, are beyond the scope of national policies. Until 1977, the encouragements to public officials to act corruptly that came from foreign sources were largely ignored, and the bribing of foreign officials did not attract any sanctions. The Foreign Corrupt Practices Act of 1977 (FCPA) was the first instance of a home country attempting to put legal limits on business practices employed by its residents abroad. This unilateral step expanded into a multilateral effort criminalizing the bribing of foreign officials by multinational enterprises (MNEs) from countries in the Americas in 1997 and Europe in 1999. However, perceived corruption and the use of bribes around the world was not significantly reduced (Getz 2006). This situation led to suggestions that a uniform sanction against the use of bribes for all MNEs, from all countries doing business anywhere in the world, is needed to prevent some MNEs from gaining by using bribes at the expense of others who do not (Cuervo-Cazurra 2008). In 2006, a full global sanction against the bribing of foreign officials by MNEs was agreed upon. Table 1 presents a chronology of the expansion of the anti-bribery regime in the watershed years: 1997, 1999, 2003, 2005, and 2006. This article examines whether the global anti-bribery regime has led MNEs to cut back on the use of bribes. In the following sections, we first present the sources of data and the measures of bribes and corruption used in the study and then examine the available data for evidence of changes in the trajectory of bribing by MNEs and corruption in the MNE host countries corresponding to the aforementioned watershed years.

Measures of Bribes and Corruption

The MNEs that engage in international business are numerous and their business practices in foreign countries are not publicly known. A practical way of organizing information about global supply of bribes is, therefore, by country of origin of firms active in paying bribes. Transparency International's Bribe Payers Index (BPI) ranks countries in terms of how engaged MNEs from these countries are in offering bribes to foreign public officials. The

TABLE 1
Sequence of Multilateral Conventions against Corruption

Name of Convention	Signatories	Year Effective
The Inter-American Convention against Corruption (OAS Convention)	Organization of American States (OAS)	1997
Organisation for Economic Cooperation & Development Convention (OECD Convention)	OECD countries and Argentina, Brazil, Chile, Bulgaria, Estonia, Slovenia, and South Africa	1999
United Nations Convention against Transnational Organized Crime	All UN members	2003
UN Convention against Corruption	All UN members	2005
African Union (AU) Convention on Preventing and Combating Corruption	All AU members	2006

Source: Transparency International (2011).

index covers between 14 and 28 countries in a given year (Table 2). These countries account for more than half of global imports and exports or foreign direct investment flows for the corresponding year.

It is safe to assume that the countries that are not represented in Table 2 are each insignificant sources of supply of bribes to foreign officials. Thus, we treat them as the host countries to MNEs and destinations for bribes from sources listed in Table 2 (MNE home countries). Strictly speaking, BPIs from different years are not comparable, except in terms of the relative ranking of the MNE home countries. Transparency International (2011) does indicate, however, that some comparison over time is permissible—for example, in the case of the indices for 2008 and 2011, as they contain a largely overlapping set of countries.

TABLE 2
Bribe Payers Index (BPI) 1999–2011

Country	1999	2002	2006	2008	2011
Argentina					2.7
Australia	1.9	1.5	2.41	1.5	1.5
Austria	2.2	1.8	2.5		
Belgium	3.2	2.2	2.78	1.2	1.3
Brazil			4.35	2.6	2.3
Canada	1.9	1.9	2.54	1.2	1.5
China	6.9	6.5	5.06	3.5	3.5
France	4.8	4.2	3.5	1.9	2
Germany	3.8	3.7	2.66	1.4	1.4
Hong Kong		5.7	3.99	2.4	2.4
India			5.38	3.2	2.5
Indonesia					2.9
Israel			3.99		
Italy	6.3	5.9	4.06	2.6	2.4
Japan	4.9	4.7	2.9	1.4	1.4
Malaysia	6.1	5.7	4.41		2.4
Mexico			3.55	3.4	3
Netherlands	2.6	2.2	2.72	1.3	1.2
Portugal			3.53		
Russia		6.8	4.84	4.1	3.9
Saudi Arabia			4.25		2.6
Singapore	4.3	3.7	3.22	1.9	1.7
South Africa			4.39	2.5	2.4
South Korea	6.6	6.1	4.17	2.5	2.1
Spain	4.7	4.2	3.67	2.1	2
Sweden	1.7	1.6	2.38		
Switzerland	2.3	1.6	2.19	1.3	1.2
Taiwan	6.5	6.2	4.59	2.5	2.5
Turkey			4.77		2.5
U.A.E.			3.38		2.7
U.K.	2.8	3.1	2.61	1.4	1.7
U.S.	3.8	4.7	2.78	1.9	1.9
Share in global trade/ FDI (all countries)	60%	60%	82%	54%	78%

Notes: The BPI was rescaled so that a higher value indicates a higher propensity to bribe. A blank indicates data is not available.
Source: Transparency International (2011).

Bribes from MNEs to foreign officials show up as corruption in the MNE host countries. When it comes to measuring the level of corruption at the host country level, various problems emerge. In particular, corruption occurs in secret and is not directly observable. Reliability of the measurement of corruption is, therefore, a key issue in any empirical study. A good measure must be able to convey the frequency and the depth of corruption and be comparable over time.

Possible objective measures of corruption—like the number of convictions or the number of corruption cases reported in the press—do not accurately reflect the incidence of corruption alone; they also measure the performance of the judiciary and freedom of the press. Both vary from country to country. Also, measures based on such objective definitions are difficult to compare because legal definitions of bribery and corruption in different countries are yet to converge to the language of the multilateral statutes. Separating fraud and embezzlement from corruption is also difficult.

In the absence of a suitable objective measure of corruption that can be used for a cross section of countries, we use the Corruption in Government index from the International Country Risk Guide prepared by Political Risk Services (referred to as the ICRG index hereafter). It is a subjective measure of corruption based on surveys that has wide usage in the literature. The ICRG index ranges from 0 to 6 with a higher number signifying lower corruption and is created from a proprietary model that is based on survey results from respondents drawn from the same population year after year. The ICRG index is a good proxy for corruption under the reasonable assumptions that (1) perceived threat of political instability to foreign investors owing to corruption increases linearly with the incidence of corruption in the country, (2) corrupt public officials make no distinction at the margin between foreign and domestic firms when it comes to extracting bribes, and (3) the same range of information is used for all countries when assessing country risks (Swaleheen 2011). The ICRG index allows for cross-country comparison and is the longest running series of data on corruption that is available.

The Trend in Bribing of Foreign Officials

We first consider some readily available descriptive data that confirm previous findings (D'Souza 2012)—notably, that gradual globalization of the criminalization of bribery has changed the behavior of MNEs from OECD countries, and that MNEs from non-OECD

convention signatories may have picked up the business and the bribing left behind by their departed colleagues. The OAS and the OECD convention signatories have a longer record of criminalizing the bribing of foreign officials compared to other countries.[2] A comparison of the average of BPI for 1999 (BPI = 3.28) and the average for the post-1999 years (BPI = 2.41) for this set of countries indicates the use of bribes was lower.[3] Yet, in the post-2006 world where all countries have adopted a common anti-bribery regime, a comparison of the means of the BPI for the same set of countries in 2008 and 2011 does not show a significant reduction in the use of bribes.[4] Thus, even after full globalization, the efficacy of anti-bribery regime is not fully confirmed.

The data on bribe payments by MNEs that are presented in Table 2 are far from adequate for a rigorous and robust test of the hypothesis that a progressive global expansion of the anti-bribery regime will lower the supply of bribe payments in the countries that host MNEs. Faced with this problem, we examine the data that are available to test whether a direct corollary of the aforementioned hypothesis is supported—namely, whether the progressive globalization of the anti-bribery regime led to concurrent changes in the incidence of corruption in the host countries where the MNEs operate. In other words, as the global anti-bribery regime tightened over time for MNEs from countries listed in Table 2, was there a concurrent decline in corruption in the rest of the world that hosted the MNEs?

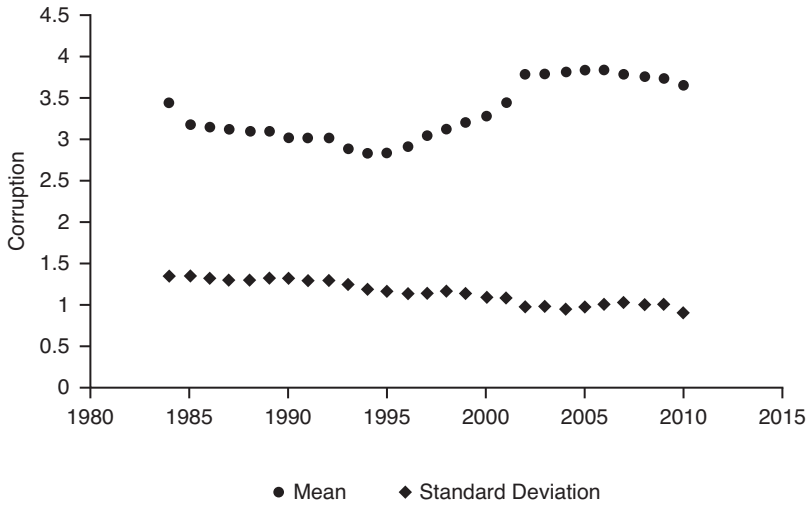
Data from the ICRG index are used to test this corollary. Given that the ICRG survey respondents are drawn from the same population every year, we hypothesize that unless there is a structural break, the distribution of the ICRG index in terms of the first and the second moments is repeated every year around an unknown trend that is driven by the process that determines corruption in each host country relative to every other host country. Note that the focus is not as much on the trend in corruption in all host countries as it is on

[2]These are Argentina, Australia, Austria, Belgium, Brazil, Canada, Germany, Japan, Mexico, Sweden, and the United States .

[3]The *t*-statistics for the null hypothesis that the two averages are equal is 1.71 (1.64 if unequal variances and independent distributions are assumed). The hypothesis that the average of BPI is lower in post-1999 years is accepted at a 6 percent level of significance.

[4]The *t*-statistic for the null hypothesis that the averages of the BPI for 2008 and 2011 are equal is −0.13.

FIGURE 1
Yearly Mean and Standard Deviation of Corruption in Host Countries



whether there is a break in this trend corresponding to the years when the anti-bribery regime went through an expansion as more countries signed on to multilateral conventions that criminalize bribing foreign officials.

Figure 1 plots the sequence of the mean and the standard deviation of the distribution of the ICRG index of corruption (rescaled so that a higher value indicates more corruption) for each year during 1984–2010 for the 146 countries in the ICRG panel that are not home to the MNEs that the data in Table 2 refer to. The graph shows that outside of the 32 MNE home countries listed in Table 2, the long-term trend in corruption in the rest of the world is rising. Corruption declined between 1984 and 1995, increased at a brisk pace between 1995 and 2002, and has remained somewhat stable thereafter. It is clear that the trend in average level of corruption in the host countries where MNEs do business has shifted over time, but, in a direction and to a level that is opposite to what one would expect from less bribing by MNEs owing to an expansion of the anti-corruption regime across the world.

Visual inspection of the trend presented in Figure 1 indicates the presence of an autoregressive process. Our examinations of the autocorrelation and the partial autocorrelation functions indicate that corruption is almost perfectly correlated with its own one-period lagged value.[5]

An augmented Dickey-Fuller test for the presence of unit root in the sequence of the mean level of corruption reveals that through the course of the sample period (1984–2010), the null hypothesis of a presence of breaks in the sequence is accepted. It is known that with structural breaks, the Dickey-Fuller test is biased toward non-rejection of the null hypothesis of a break (Enders 2010: 227). As we anticipate structural breaks in the sequence, we performed Perron's test, and it led to the same conclusion: there are structural breaks in the trend of the average level of corruption presented in Figure 1.

The question now is: Did the breaks occur in any of the years (1997, 1999, 2003, 2005, and 2006) when the coverage of global anti-bribery expanded? If the multilateral conventions against bribery worked, there should be evidence of structural breaks in one or more of these years of expansion. We perform Chow tests for structural breaks in each of these years by using the first-order autoregressive model in Equation 1.

$$(1)\quad M_t = \beta_0 + \beta_1 M_{t-1} + \gamma_0 D_t(\tau) + \gamma_1[D_t(\tau) \times M_{t-1}] + u_t,$$

where M is the mean of ICRG index in countries other than MNE home countries, τ is the hypothesized break year, and $D_t(\tau)$ is a binary variable that equals zero before the break date and 1 after. Thus, under the null hypothesis of no break at year τ, $\gamma_0 = \gamma_1 = 0$ against the hypothesis that at least one of the γ's is nonzero. The results are summarized in Table 3. The test results do not reveal any evidence of structural breaks corresponding to the years that marked the high-water levels in the expansion of the prohibition of illegal payments to foreign officials.

Conclusion

The United States was the first country to criminalize the bribing of foreign officials by its MNEs in 1977. The rest of the world joined

[5]Results are available from the authors.

TABLE 3
Chow Tests for Structural Break

Null Hypothesis	Break Year				
	1997	1999	2003	2005	2006
No break ($\gamma_0 = 0$)	Accept	Accept	Accept	Accept	Accept
(p value)	(0.5)	(0.8)	(0.9)	(0.9)	(0.9)
No break ($\gamma_1 = 0$)	Accept	Accept	Accept	Accept	Accept
(p value)	(0.5)	(0.8)	(0.9)	(0.9)	(0.9)
$\gamma_0 = \gamma_1 = 0$	Accept	Accept	Accept	Accept	Accept
(p value)	(0.83)	(0.95)	(0.99)	(0.99)	(0.99)

in in phases, and in 2006, a global anti-bribery sanction was agreed upon. This global prohibition was expected to lower the transnational supply of bribes and other illicit inducements to foreign officials and lead to a significant decline in the incidence of corruption around the globe. There is little evidence that these expectations have been realized. Data from Transparency International on bribe payments by MNEs before and after a fully globalized anti-bribery regime do not indicate a decline in the use of bribes to influence foreign officials. There is not one instance of a dip in the trajectory of public corruption in the countries where the MNEs do business that corresponds to any one of the five multilateral conventions that expanded and tightened the global anti-bribery regime. Indeed, the problem of corruption in the countries where MNEs operate has continued to grow.

One possible, albeit partial, explanation is that the U.S. Foreign Corruption Practices Act of 1977 and the OAS (effective 1997) and OECD (1999) conventions compelled MNEs from respective member countries to shift business to host countries where corruption is less acute (Cuervo-Cazurra 2008, D'Souza 2012), while MNEs from other countries (e.g., China, India, Turkey) filled the resulting vacuum. Further research may reveal that the quality of institutions in the countries that are home to the latter group of MNEs is not sufficiently strong to ensure the same degree of enforcement of anti-bribery laws as in OAS and OECD member countries. If that is the case, the United States and fellow OAS and

OECD member countries may need to consider limiting the geographical coverage of multilateral anti-bribery law to countries with strong institutions and level the playing field for all MNEs.

References

Aidt, T. S. (2003) "Economic Analysis of Corruption: A Survey." *The Economic Journal* 113: F632–52.

Bardhan, P. (1997) "Corruption and Development: A Review of Issues." *Journal of Economic Literature* 35: 1320–46.

Bhagwati, J. (1982) "Directly Unproductive Profit-Seeking (DUP)Activities." *Journal of Political Economy* 90: 988–1002.

Brunetti A., and Weder, B. (2003) "A Free Press Is Bad News for Corruption." *Journal of Public Economics* 87 (7): 1801–24.

Cuervo-Cazurra, A. (2008) "The Effectiveness of Laws against Bribery Abroad." *Journal of International Business Studies* 39 (4): 634–51.

D'Souza, A. (2012) "The OECD Anti-Bribery Convention: Changing the Currents of Trade." *Journal of Development Economics* 97: 73–87.

Enders, W. (2010) *Applied Time Series Econometrics*. 3rd ed. New York: John Wiley & Sons.

Getz, K. A. (2006) "The Effectiveness of Global Prohibition Regimes: Corruption and the Anti-Bribery Convention." *Business and Society* 45 (3): 254–81.

Goel, R. K., and Nelson, M. A. (1998) "Corruption and Government Size: A Disaggregated Analysis." *Public Choice*, 97: 107–20.

Huntington, S. P. (1968) *Political Order in Changing Societies*. New Haven: Yale University Press.

Jain, A. K. (2001) "Corruption: A Review." *Journal of Economic Surveys* 15: 71–121.

Krueger, A. O. (1974) "The Political Economy of the Rent-Seeking Society." *American Economic Review* 64: 291–303.

Kurer, O. (1993) "Clientelism, Corruption and the Allocation of Resources." *Public Choice* 77: 259–73.

Lambsdorff, J. G. (1998) "An Empirical Investigation of Bribery in International Trade." *European Journal of Development Research* 10 (1): 40–59.

Leff, N. H. (1964) "Economic Development through Bureaucratic Corruption." *American Behavioral Scientist* 8: 8–14.

Leys, C. (1965) "What Is the Problem about Corruption? *Journal of Modern African Studies* 3: 215–30.
Mauro, P. (1995) "Corruption and Growth." *Quarterly Journal of Economics* 110: 681–712.
Méon, P., and Sekkat, K. (2005) "Does Corruption Grease or Sand the Wheels of Growth?" *Public Choice* 122: 69–97.
Mo, P. H. (2001) "Corruption and Economic Growth." *Journal of Comparative Economics* 29: 66–79.
Murphy, K. M.; Shleifer, A.; and Vishny, R.W. (1991) "Allocation of Talent: Implications for Growth." *Quarterly Journal of Economics* 106 (2): 503–30.
Osterfeld, D. (1992) *Prosperity versus Planning: How Government Stifles Economic Growth*. New York: Oxford University Press.
Pecorino, P. (1992) "Rent Seeking and Growth: The Case of Growth Through Human Capital Accumulation." *Canadian Journal of Economics* 25 (4): 944–56.
Pelligrini, L., and Gerlagh, R. (2004) "Corruption's Effect on Growth and Its Transmission Channels." *Kyklos* 57 (3): 429–56.
Rose-Ackerman, S. (1997) "The Political Economy of Corruption." In K. A. Elliot (ed.), *Corruption and the Global Economy*, 31–66. Washington: Institute for International Economics.
Swaleheen, M. (2011) "Economic Growth with Endogenous Corruption: An Empirical Study." *Public Choice* 146: 23–41.
Swamy, A.; Knack, S.; Lee, Y.; and Azfar, O. (2001) "Gender and Corruption." *Journal of Development Economics* 64 (1): 25–55.
Transparency International (2011) "Bribe Payers Index, 2011." Available at www.transparency.org/bpi2011.
Treisman, D. (2000) "The Causes of Corruption: A Cross-National Study." *Journal of Public Economics* 76 (3): 399–457.
Tullock, G. (1993) "Rent Seeking." *The Shaftesbury Papers*, Vol. 2. Northhampton, Mass.: Edward Elgar.