The Impact of Corruption on Entry Strategy: Evidence from Telecommunication Projects in Emerging Economies

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With globalization and the growth in emerging economies, multinational enterprises (MNEs) now frequently confront challenges associated with corrupt governments. Already, a growing body of research has demonstrated that corruption significantly reduces a country’s aggregate inflows of foreign direct investment through its effects on firm performance. We move the analysis of corruption from aggregate financial flows toward managerial theory and practice by examining how firms adjust their strategy for entering foreign markets in corrupt environments and how different types of corruption affect firms’ choices. Building on institutional theory, we predict that MNEs will respond to pervasive and arbitrary corruption in a host country by selecting particular types of equity and nonequity modes of entry. Using data on 220 telecommunications development projects in 64 emerging economies, we find that firms adapt to the pressures of corruption via short-term contracting and entry into joint ventures. We also find that the arbitrariness surrounding corrupt transactions has a significant impact on firms’ decisions, in addition to the overall level of corruption. In contrast to extant research, we show that MNEs use nonequity-entry modes or partnering as an adaptive strategy to participate in markets despite the presence of corruption.

Key words: corruption; mode of entry; emerging economies

Government corruption has become a serious problem for international organizations and individual nations (The Economist 2002). Corruption—i.e., the abuse of public power for private benefit—has been shown to significantly diminish both macroeconomic development and firm-level growth (Mauro 1995). Research on corruption has emphasized its strong economywide effects and, more recently, its significant implications for firms (Doh et al. 2003, Habib and Zurawicki 2002, Rodriguez et al. 2005). Still, management scholars have yet to fully address this topic. This deficit in firm-level research on corruption is particularly troublesome, as the pattern of globalization has raised the likelihood that firms will encounter corruption. Corruption is particularly widespread in transition and less-developed economies (Hellman et al. 2000)—which we combine here under the term emerging economies—but can be problematic in virtually all countries. However, there has been little attention accorded to the question of how firms respond to corruption.

We move the discussion of corruption toward managerial theory and practice by examining how firms adapt to corrupt environments through their strategy for entering foreign markets. The mode-of-entry decision is a critical element of international expansion. It substantially influences firms’ resource commitment, investment risk, degree of control, and profits from international operations (Shrader 2001). Entry-mode decisions are costly to reverse, and thus have significant implications for long-term performance, even for large MNEs (Hill et al. 1990). The management literature has identified numerous firm-level factors that affect entry mode (Davis et al. 2000, Delios and Beamish 1999, Shrader 2001), as well as country-level factors such as political risk, national culture, and institutional characteristics (Henisz and Delios 2001, Rosenzweig and Singh 1991, Yiu and Makino 2002). We add to these substantial efforts by introducing corruption as an important and independent country-level factor influencing the mode of entry.

Generally, in the literature on management and international business it is assumed that government and its officials operate so as to maximize public well-being (Dunning 1993, Lenway and Murtha 1994). One consequence of this common presumption is a dearth of
research on how firms adjust their strategies in response to governments and officials that engage in self-serving behavior. Similarly, there is little evidence on how firms cope with corruption apart from avoiding entry. While some suggest that corruption may ease MNE interactions with the government (Boddewyn 1988, Ring et al. 1990), the entry literature has largely overlooked the political behavior of MNEs and is rather silent on nonmarket transactions, which may be critical to survival and performance in foreign markets (Boddewyn and Brewer 1994).

We depart from the existing literature in at least three significant ways. First, we provide evidence that corruption is an important factor influencing the mode of entry. Second, we employ a refined view of corruption (Rodriguez et al. 2005, Shleifer and Vishny 1993, Wei 1997) and show that the arbitrariness associated with corruption adds explanatory value over the typically considered notion of the level or pervasiveness of corruption. Pervasiveness of corruption reflects the degree to which corruption is dispersed throughout the public sector in a country; arbitrariness reflects the degree of uncertainty and capriciousness associated with public sector corruption. Third, whereas previous research has focused on aggregate investment inflows, we show that MNEs use nonequity-entry modes or joint ventures as an adaptive strategy to participate in markets despite the presence of corruption. Hence, our principal research question is how these two aspects of government corruption—pervasiveness and arbitrariness—affect the foreign entry-mode choice of MNEs into emerging economies. In particular, we examine how these two aspects independently and jointly affect an MNE’s choice among nonequity entry, joint venture, and wholly owned subsidiary.

We draw on institutional theory to provide a rich firm-level analysis of the implications of corruption for management and to develop our hypotheses. Our empirical analysis utilizes two major data sets created by the World Bank. One contains detailed data on corruption in 80 countries. The other provides in-depth information on more than 400 telecommunications projects involving private firms in emerging markets.

Literature Review and Theoretical Background

The Nature of Corruption

To examine how corruption affects foreign entry mode, we first introduce research refining the concept of corruption. Most scholars view corruption as occurring at the interface of the public and private sectors where a public official has discretionary power over access to, or the distribution of, resources to the private sector (e.g., Rose-Ackerman 1999). We use a simple definition of corruption that accords with this view: the abuse (or misuse) of public power for private benefit (Bhardan 1997, Treisman 2000).

Extant research on corruption identifies numerous direct and indirect costs borne by firms operating in countries where government corruption is significant. Costs include bribes and queuing costs (Fisman 2001), weak infrastructure, and a propensity to skew public spending toward projects in which kickbacks and bribes are easily hidden (Mauro 1998).

Some research suggests that the most pronounced effects of corruption stem from the uncertainty surrounding corrupt transactions rather than from their monetary cost and frequency (Shleifer and Vishny 1993, Wei 1997). Relating this insight to management research, Rodriguez et al. (2005) distinguish between two dimensions of corruption. Pervasiveness of corruption is “the average firm’s likelihood of encountering corruption in its normal interactions with state officials” (p. 385). Pervasiveness reflects the overall likelihood that a firm and its resources are required to be engaged with corrupt officials. Where corruption is highly pervasive, it is a fully institutionalized part of commercial activity.

Corruption varies widely across countries both in its reach throughout the economy (Transparency International 2001), and in the amount of uncertainty it creates for firms. The level of uncertainty associated with corruption, or arbitrariness (Wei 1997), reflects the degree of ambiguity associated with corrupt transactions in a given state (Rodriguez et al. 2005). Where corruption is arbitrary, overlapping and tenuous jurisdictions may lead to multiple ineffectual corrupt transactions. State officials capriciously enter the market for extortion and are willing to vary the set of necessary approvals to extract maximal bribes (Shleifer and Vishny 1993). In addition, commerce is hindered by obscure institutional arrangements. Shleifer and Vishny (1993) suggest that “organized” corruption regimes may be more extractive in financial terms, and yet be less harmful to firm performance than “disorganized” regimes. Accordingly, bribes paid under organized regimes are akin to taxes (Wei 1997). In contrast, under disorganized regimes, transactions tend to be unpredictable because they do not emerge from a stable underlying power structure or social arrangement.

Corruption and Foreign Entry

A growing body of research finds that corruption significantly reduces foreign direct investment (FDI) into an economy (for recent reviews, see Bhardan 1997, Habib and Zurawicki 2002, Mauro 1995). Corruption reduces aggregate FDI even when controlling for political risk, cultural distance, and level-of-corruption differences between the home and host countries (Habib and Zurawicki 2002). Research has also shown that both the level and the arbitrariness of corruption independently
reduce FDI (Campos et al. 1999, Wei 1997). Considering entry-mode choice illuminates the finer influences of corruption on firm behavior and furthers the understanding of the impact of corruption on FDI.

We examine entry-mode decisions that involve an MNE’s choice among three alternatives: equity entry via a wholly owned subsidiary, equity entry via a joint venture, and nonequity entry. We regard nonequity entry to include all entry events in which the MNE is engaged for its technological and managerial competencies and does not assume any ownership (i.e., management contracts). We also consider as nonequity entry those cases that involve an initial equity contribution, but for which the ownership stake is transferred to a local party—usually the government—as a stipulation of the initial contract (build-own-transfer projects) (Pan and Tse 2000). Conventionally, these types of entry are referred to as turnkey projects, with firms largely exporting know-how (Hill 1994), whereas equity forms of entry involve build-own-operate projects in which firms maintain ownership and control, involving a long-term commitment to the country.

We employ institutional theory in the development of our hypotheses because it emphasizes the importance of the social and cultural environment to firm strategy (Scott 1995). Institutional theory has recently been found to provide robust predictions regarding entry-mode choice in view of host-country conditions (e.g., Davis et al. 2000, Henisz and Delios 2001, Yiu and Makino 2002), in particular when entering emerging economies (Hoskisson et al. 2000). Institutional theory suggests that where rules and practices are broadly diffused, organizations will conform to their institutional context. A taken-for-granted quality renders many practices the “obvious” or “natural” way to conduct organizational activities (Oliver 1991, p. 148). MNEs, however, may generate intrafirm institutional pressures when adapting to various institutional environments, possibly reducing internal consistency when subsidiaries adapt to local conditions that conflict with norms or rules in other parts of the organization (Rosenzweig and Singh 1991, Xu and Shenkar 2001). To cope with such conflicting pressures, firms may engage in strategic behavior (Scott 1995), such as the adjustment of entry modes (Davis et al. 2000).

**Hypotheses**

**Corruption and Nonequity Entry**

We assess the impact of the pervasiveness and arbitrariness of corruption on entry mode. In addition to the options of equity entry via joint ventures with local firms and wholly owned subsidiaries, we examine the option of nonequity entry (management contracts and turnkey projects in our sample) because we expect that it becomes especially attractive where corruption is significant. We distinguish between equity and nonequity entry not to suggest that firms follow a nested, two-step decision-making process when choosing entry mode, but rather to highlight conceptually different aspects of the entry-mode decision—in particular, internal institutional consistency and partnering considerations under institutional constraints.

Institutional theory predicts that firms adopt broadly diffused business practices out of convenience, and to achieve access to resources and support by critical stakeholders (DiMaggio and Powell 1983, Oliver 1991, Tolbert and Zucker 1983). As described previously, pervasiveness reflects the degree to which corruption is broadly dispersed within the public sector and established as a taken-for-granted institution. In a study of local and foreign firm adaptation to corruption in India, Collins and Uhlenbruck (2004) find that managers’ perception of government corruption as taken for granted is positively related to their firms’ engagement in corruption. Although firms’ engagement in corruption is a covert activity, as pervasiveness rises the opportunity to regularly observe corruption, and thus the likelihood of imitation, may also rise. Thus, pervasive corruption indicates a higher likelihood that entering firms operating in the country will also engage in corruption.

For MNEs, equity entry requires not only a major resource commitment, but also ongoing direct management of the subsidiary and long-term interaction with various local government agencies (Hill et al. 1990, Pan and Tse 2000). Subsidiaries require local registration, permits, and various other government services, all involving opportunities for extortion (Radaev 2000). The more pervasive corruption is, the more likely MNE subsidiaries are to encounter such pressures to engage in corruption. When corruption is widespread, i.e., highly pervasive, local firms, as well as MNE subsidiaries, are more likely to comply with corrupt practices.

Congruity with local institutions, however, may cause more problems than it solves. The engagement of local subsidiaries in corruption may collide with the internal values and norms of the entering MNE, given that it operates in varying normative environments. An MNE may also have to submit to home country or international institutional anticorruption rules, such as the Foreign Corrupt Practices Act (FCPA) in the United States (Doh et al. 2003). The dissimilar institutional conditions of subsidiaries’ external and internal environments may create conflicting sets of institutional pressures, which reduce internal legitimacy, integration, and stability of the organization (Kostova and Roth 2002, Rosenzweig and Singh 1991, Westney 1993, Xu and Shenkar 2001). MNEs may avoid or at least reduce these pressures via nonequity entry because this entry mode does not require establishing local subsidiaries, but still exploits otherwise attractive markets. For example, exporting, or short-term entry via turnkey projects, may be a means
of overcoming the internal institutional pressures created by the varying types of environments in which MNE subsidiaries operate (Davis et al. 2000), including variation in pervasiveness of corruption in the host country.

Moreover, nonequity modes of entry reduce barriers to exit (Williamson 1979). By exporting, or engaging in other arm's-length transactions such as turnkey projects, MNEs reduce their direct exposure to corruption by using local firms as their agents (Doh et al. 2003). Existing local firms will not necessarily require the same government approvals and permits as a new entrant; therefore, the exporting firm is less likely than new foreign investors to engage corrupt officials. The duration of turnkey projects is typically limited, and so interactions with potentially corrupt government agencies are more easily anticipated (Pan and Tse 2000).

Accordingly, nonequity entry may significantly decrease the pressures to engage in corruption in the host country relative to equity entry. Because we expect that pervasiveness increases pressures on subsidiaries to engage in corruption, potentially causing MNE-internal inconsistencies, whereas nonequity entry increases flexibility to avoid corrupt environments, we predict:

**Hypothesis 1A.** The higher the pervasiveness of corruption, the higher the likelihood that foreign entrants engage in nonequity rather than equity modes of entry.

Firms facing uncertainty tend to conform to pressures from the institutional environment in an attempt to reduce variability. Uncertainty reduces the discretion firms have in responding to institutional forces (Xu and Shenkar 2001). Compliance here serves as a protection against turbulence and leads to organizational stability (Henisz and Delios 2001, Meyer and Rowan 1977, Oliver 1991). Accordingly, the arbitrariness of corruption provides further incentives for subsidiaries to acquiesce to local conditions and follow local practices. If the arbitrariness of corruption is low, payments to corrupt officials are much like an explicit tax (Wei 1997), which should not affect governance decisions (Williamson 1985). However, as arbitrariness rises, firms have to negotiate with and monitor officials. This too may increase the likelihood for firms to notice others engaging in corruption and, thus, encourage imitation. More importantly, where corruption is arbitrary, laws and policies may be subject to capricious interpretation by judges and government officials (Ahlstrom and Bruton 2001, Rodriguez et al. 2005).

Long-term investors in particular face the risk of unpredictable changes in government regulations (Henisz and Williamson 1999). Levy and Spiller (1994), for example, provide evidence that the long-lived investments in infrastructure sectors are particularly sensitive to uncertainty. Firms may seek to overcome this uncertainty by trying to co-opt government officials, i.e., engage in corruption in an attempt to increase predictability. Consequently, institutional theory predicts that a subsidiary is more likely to engage in corruption as it becomes more arbitrary. However, as in the case of pervasiveness of corruption, engaging in corruption because it is arbitrary will likely lead to MNE-internal inconsistencies. To avoid these, we predict firms engage in nonequity entry in countries with high levels of corruption arbitrariness.

**Hypothesis 1B.** The higher the arbitrariness of corruption, the higher the likelihood that foreign entrants engage in nonequity rather than equity modes of entry.

Arbitrariness and pervasiveness jointly describe the nature of corruption in a given country; MNEs encounter degrees of both dimensions wherever they locate. We expect that the relationship between the two and entry mode is multiplicative rather than additive. Pervasiveness determines the degree of external institutional pressures on firms to adopt corrupt behavior. Arbitrariness is a source of uncertainty, which firms attempt to reduce by conforming to institutional pressures. Theoretically, arbitrariness does not lead to uncertainty where firms do not encounter corruption at all, i.e., where pervasiveness is at zero. However, the cumulative toll on a firm operating where corruption is arbitrary should be increasing in the pervasiveness of corruption. For instance, if an entire court system is corrupt (high pervasiveness), arbitrary decisions create more uncertainty than if only some courts are corrupt (lower pervasiveness) and firms can expect better outcomes through legal recourse if needed.

Likewise, an increase in arbitrariness can be expected to raise the impact on firms of a given level of pervasiveness. Time and effort expended on negotiations with government officials rise with arbitrariness, and the higher the level of pervasiveness, the more officials a firm will have to negotiate with, thereby increasing a firm’s engagement with corrupt officials. Highly pervasive corruption offers no safe haven for firms seeking some source of meritocratic governmental assistance—a problem made all the worse if even corrupt services and processes are unpredictable. Consequently, we expect that as either of the two dimensions of corruption increases, the marginal effect of the other dimension also increases, inflating the likelihood that local subsidiaries comply with corrupt conditions and thus raising threats to internal legitimacy.

**Hypothesis 1C.** The interaction of pervasiveness and arbitrariness increases the likelihood that foreign entrants engage in nonequity entry.

**Equity Entry into Corrupt Countries**

Entry via wholly owned subsidiaries provides more control and profit potential. Local partners can reduce risks associated with equity entry and help overcome the liability of foreignness by providing access to location-specific knowledge and local networks, fostering external legitimacy, and lowering direct costs of
entry (Beamish and Banks 1987, Hill et al. 1990, Yiu and Makino 2002). Independent of the level of arbitrariness, however, pervasive corruption may reduce the benefits of local partners because compliance with government corruption can yield government support, create access to political processes, and reduce institutional complexity (Boddewyn and Brewer 1994, Ring et al. 1990, Rodriguez et al. 2005).

Corruption creates a means to access local political processes for both foreign and domestic firms (Boddewyn and Brewer 1994). High pervasiveness of corruption allows the foreign firm to acquire local government consent (Ring et al. 1990) and can provide the firm with permits, resources, and contracts that may make it more favorable to existing and potential local customers. This, in turn, reduces the need for integration of the foreign firm in local networks. Normally, local firms have better contacts with politicians because of their local history. However, pervasive corruption enables foreign firms to overcome this disadvantage through payments to those with political power. Where government decisions can be shaped through bribery, officials may create market imperfections that benefit entering MNEs by changing regulatory standards or raising the institutional complexity for competitors (Rodriguez et al. 2005).

Foreign firms are typically disadvantaged when entering a country because of environmental uncertainty and institutional complexity. Challenges of entry and postentry survival include accessing infrastructure services, obtaining local licenses, and managing a host of legal issues related to operation. The institutional environment in emerging economies may give rise to political hazards such as spurious changes in the tax code and other forms of expropriation (Delios and Henisz 2000). Under such conditions, competitors or local partners may take advantage of foreign firms by leveraging their experience with weak institutions. Where corruption is pervasive, however, the playing field is somewhat leveled for foreign firms. When the characteristics of corrupt transactions are explicit and knowable, the likelihood that any one firm will reap special advantages is diminished. Hence, pervasive corruption affords fewer historical or knowledge-based advantages to local firms over and above those that foreign firms may acquire, thereby reducing the benefits of partnering.

We have suggested that engagement in corruption will likely lead to internal institutional inconsistencies. MNEs may consider using joint venture partners to buffer themselves from pervasively corrupt practices. However, the utility of local partners as a buffer from corrupt practices is limited. Engaging with local partners in pervasively corrupt countries may easily lead to accusations of indirect engagement in corruption. The U.S. FCPA, for example, holds U.S.-based firms accountable for the corrupt acts of their joint venture partners. The limited control over decisions in a joint venture, especially where the risks of corrupt behavior are high, may increase rather than decrease the internal pressures. Therefore, we suggest MNEs choose nonequity entry if pervasiveness of corruption is high and internal consistency is a major concern (see Hypothesis 1A), but if equity entry is chosen for reasons independent of concerns over local corruption, it will likely occur without a local partner.

**Hypothesis 2A. The higher the pervasiveness of corruption, the higher the likelihood that foreign entrants entering via equity-entry modes engage in a wholly owned subsidiary rather than a joint venture with a local partner.**

The arbitrariness of corruption, on the other hand, raises environmental uncertainty and increases the liability of foreignness. The process of striving for government support by complying with the institutional context is obstructed by its complexity (Kostova and Zaheer 1999). Arbitrariness of corruption reduces firms’ ability to determine their critical constituents, making compliance more difficult (Oliver 1991). In such an environment, entering MNEs must find alternative sources of stability and support.

Research has shown that foreign firms attempt to gain external legitimacy by allying with established firms when interactions with government officials generate uncertainty (Tolbert and Zucker 1983, Yiu and Makino 2002). Notwithstanding the challenges corruption poses for firms adapting to an environment, the more corruption, the higher the benefits of local legitimacy to entering firms (Rodriguez et al. 2005). Government officials face less risk extorting nonlegitimate firms, and are therefore more likely to attempt to engage those firms in corruption. A firm with a high degree of legitimacy can evoke the support of other organizations for protection from corrupt agencies (Suchman 1995) and thereby create a defense against corrupt officials (Ahlstrom and Bruton 2001). This protection is particularly valuable when corruption is highly arbitrary, because firms will be uncertain as to whether and how their freedom to operate will be reduced by corrupt officials. The higher the legitimacy of a firm, the lower the probability that corruption will limit its activities, and thus the higher its incentive will be to partner with local firms so as to increase legitimacy. Consequently, foreign firms may be induced to trade ownership for local legitimacy in order to reduce pressures of corruption.

Moreover, partnering reduces investment risk in two ways: cutting resource commitment by dividing resource inputs among partners, and, in particular, increasing knowledge about the host-country environment gained from local partners (Beamish and Banks 1987, Hill et al. 1990, Yiu and Makino 2002). That is, through a joint venture with a local partner, the entering MNE can
reduce uncertainty associated with arbitrary corruption by receiving information on how to deal with it. Numerous studies have found that firms entering markets characterized by high uncertainty prefer joint ventures over wholly owned subsidiaries because of the reduced risk exposure of their investment (e.g., Delios and Beamish 1999).

Local partners provide another benefit to the foreign entrant in environments characterized by highly arbitrary corruption: access to local networks. When dealing with uncertain and opaque institutions, firms develop coping mechanisms (Radaev 2000). Corruption reduces confidence in the state’s ability and willingness to protect property rights, and so trust becomes very important (Pearce 2001, Rose-Ackerman 2001). Local firms adapt to the lack of confidence in the state by establishing exclusive social networks (Peng and Heath 1996, Rose-Ackerman 2001). This consequence of arbitrary corruption may serve as a substantial barrier to entry to foreign firms. Local partners that belong to local networks and have access to exclusive markets offer foreign entrants a way to overcome these barriers.

**Hypothesis 2B.** The higher the arbitrariness of corruption, the higher the likelihood that foreign entrants entering via equity-entry modes engage in a joint venture with a local partner rather than a wholly owned subsidiary.

Similar to the argument for Hypothesis 1C, we suggest that the combination of pervasiveness and arbitrariness of corruption independently increases the challenges associated with foreign entry. As the arbitrariness of corruption rises, it becomes more difficult for foreign entrants to access the advantages of pervasive corruption. While pervasive corruption promises firms direct access and influence on bureaucratic decisions and possibly to higher-level political processes, the arbitrariness associated with corruption erodes this potential benefit to MNEs. If government officials successfully solicit bribes, but do not predictably provide the agreed-upon service, bribe-paying firms are not substantially advantaged by engaging in corruption. The nature of corruption also allows little legal recourse. That is, whereas pervasiveness raises the likelihood that government officials encountered by MNEs will be corrupt and apparently can be co-opted, arbitrariness raises the uncertainty surrounding negotiations and attempts to co-opt government officials. As the arbitrariness of corruption obstructs the comprehension of the local institutional context, an entering firm will grow more likely to rely on local firms to provide some measure of legitimacy and knowledge needed to deal with corrupt officials. Accordingly, we expect that for any given level of pervasiveness, arbitrariness of corruption increases the likelihood of entry with a local partner.

**Hypothesis 2C.** The positive relationship between pervasiveness of corruption and equity entry via wholly owned subsidiary is weakened by the arbitrariness of corruption.

**Methods**

**Data Sources and Key Variables**

In order to test these hypotheses, we acquired a data set of over 400 telecommunications projects in 96 emerging countries drawn from the World Bank’s Private Participation in Infrastructure (PPI) Database. Telecommunications is a particularly appropriate industry for this study because 40% of global FDI in the 1990s was made by telecommunications MNEs, largely into emerging economies (World Bank 1999). Furthermore, infrastructure projects typically involve numerous government agencies and multiple levels of approval. Thus, public corruption is an important environmental variable for telecommunications projects. In all, 85% of the projects in our analysis originated during the period 1996–1998, a particularly active period in private investment in emerging country infrastructure, while the rest originated in the six years before. The host countries in the PPI database represent all major geographic regions of the world and a substantial proportion of the countries that are generally characterized as developing or transition economies.

Our trichotomous dependent variable is constructed from variables in the PPI database and indicates the entering firm’s choice of entry mode. The three entry-mode choices comprise two equity-mode choices (wholly owned subsidiary and joint venture) and one nonequity mode choice (build-own transfer/turnkey projects). Next, we derived measures of both the pervasiveness and arbitrariness of corruption from the 1998 World Business Environment Survey (WBES), which focuses on perceptions of environmental factors facing firms. Unlike other surveys of corruption (e.g., from Transparency International or the World Economic Forum), WBES provides information on both the extent and nature of expectations surrounding corrupt transactions. WBES was drawn from a sample of 8,000 firms representing approximately 100 firms of various sizes in each of 80 emerging countries.

Statistical comparisons of the WBES corruption measures with those of Transparency International’s Corruption Perceptions Index (CPI) and its individual constituent polls reveal a high degree of intersurvey correlation (pairwise correlations of 0.80 and higher) in any given year and very low variability in corruption measures across years (Kaufmann 1998). Measures of perceived corruption in the CPI are highly correlated over short spans of five years (pairwise correlation for 1997–2002 of 0.97) as well as periods up to 17 years (pairwise correlation for 1985–2002 of 0.88). We confirm
similar levels of stability in perceptions of corruption in the WBES. Pairwise correlations between the 1998 and 2000 survey are 0.96 for pervasiveness and 0.94 for arbitrariness. Thus, the perceptions targeted by survey instruments on corruption appear to measure the same stable environmental characteristics.

The measures of the two dimensions of corruption, pervasiveness and arbitrariness, are drawn from two sets of questions on corruption in the WBES. Confirmatory factor analysis was used to assess convergent and discriminant validity. The survey questions are presented in the appendix. The items have been critically examined for their reliability and utility in making cross-country comparisons. The first set of questions relates to pervasiveness and asks respondents to rank the corruption they face in their environment on a scale of 1 to 6 according to the extent to which “unofficial payments” are needed to get things done connected with government approvals, permissions, licenses, infrastructure, services, or taxes. The second set of questions asks respondents to rank their environment according to the extent to which the terms of corrupt transactions are predictable and the services or items for which a bribe is paid are usually delivered as agreed. The two factors resulting from our analysis form our measures of corruption pervasiveness and arbitrariness. Joining the data from the two databases resulted in a sample of 220 projects involving foreign entry into 64 countries. Our sample comprises 22 nonequity, 87 wholly owned subsidiaries, and 111 joint ventures (see Table 1 for descriptive data).

**Country, Environmental, and Project Controls**
We included several variables in our regressions to control for country, industry, project, and firm-level characteristics. Per capita income is highly correlated with the availability and quality of and demand for infrastructure services, the quality of social services, and the stability of long-term economic growth rates (Easterly 2000, Rose-Ackerman 1999). Per capita gross domestic product (GDP) is included as a control variable in our regressions and measured in thousands of 1998 inflation-adjusted dollars. All else equal, larger markets offer larger potential returns, which may be particularly important in telecommunications projects where the marginal costs of additional service provision are typically very low. We also include a measure of total GDP measured in constant dollars and adjusted for price level, to serve as a broad proxy for market size (Habib and Zurawicki 2002). In addition to general governmental quality, we expect that political stability, which has been associated with the desirability of investing with local partners (Smarzynska and Wei 2000) and of engaging in illegal transactions (Habib and Zurawicki 2002), affects entry. We control for political risk in our regressions using a measure taken from the PRS group, a widely respected international political risk consultancy.

Formal restrictions on foreign investments certainly affect entry and often reflect successful efforts by local interests to limit competition to those mechanisms that perpetuate their power, profitability, and control (Rajan and Zingales 2003). Our measure of formal restrictions on foreign investments is drawn from the Heritage Foundation’s annual Index of Economic Freedom. We label this ordinal variable, FDI Restrictions, which varies from 1 (representing open and impartial treatment of foreign investment) to 5 (representing active prevention of foreign investment). We complement the formal constraints captured in the FDI Restrictions variable with a measure of a country’s commitment to open competition in telecommunications markets. In 1995 the World Trade Organization (WTO) established a set of 17 regulatory commitments related to competition in the provision of telecommunications services. We code an ordinal variable from 0 to 17, signifying the number of WTO

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<th>Variable</th>
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<td>-0.28</td>
<td>-0.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. WTO commitments</td>
<td>10.85</td>
<td>5.40</td>
<td>-0.15</td>
<td>0.51</td>
<td>0.55</td>
<td>0.24</td>
<td>0.29</td>
<td>-0.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Project size</td>
<td>0.68</td>
<td>1.82</td>
<td>-0.06</td>
<td>0.21</td>
<td>0.17</td>
<td>0.14</td>
<td>0.03</td>
<td>-0.05</td>
<td>0.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Technology</td>
<td>0.73</td>
<td>0.44</td>
<td>0.10</td>
<td>-0.18</td>
<td>-0.16</td>
<td>-0.09</td>
<td>-0.28</td>
<td>0.10</td>
<td>-0.28</td>
<td>-0.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. State participation</td>
<td>9.36</td>
<td>23.76</td>
<td>0.08</td>
<td>0.02</td>
<td>0.05</td>
<td>0.12</td>
<td>0.19</td>
<td>-0.05</td>
<td>-0.13</td>
<td>0.10</td>
<td>-0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. U.S. firm</td>
<td>0.20</td>
<td>0.40</td>
<td>-0.03</td>
<td>0.11</td>
<td>0.15</td>
<td>0.05</td>
<td>0.07</td>
<td>-0.06</td>
<td>0.05</td>
<td>0.04</td>
<td>0.08</td>
<td>-0.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Home country CPI</td>
<td>5.56</td>
<td>2.35</td>
<td>0.13</td>
<td>0.21</td>
<td>0.25</td>
<td>-0.04</td>
<td>0.05</td>
<td>-0.14</td>
<td>0.05</td>
<td>0.03</td>
<td>0.09</td>
<td>0.18</td>
<td>0.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Experience</td>
<td>4.07</td>
<td>4.32</td>
<td>-0.18</td>
<td>0.01</td>
<td>0.04</td>
<td>-0.04</td>
<td>0.09</td>
<td>-0.04</td>
<td>0.02</td>
<td>-0.05</td>
<td>0.22</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Pervasiveness</td>
<td>3.95</td>
<td>0.81</td>
<td>0.15</td>
<td>-0.16</td>
<td>-0.09</td>
<td>-0.12</td>
<td>-0.07</td>
<td>-0.04</td>
<td>0.03</td>
<td>0.02</td>
<td>0.04</td>
<td>0.06</td>
<td>-0.05</td>
<td>-0.20</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>15. Arbitrariness</td>
<td>3.31</td>
<td>0.88</td>
<td>0.23</td>
<td>-0.46</td>
<td>-0.22</td>
<td>-0.33</td>
<td>0.08</td>
<td>0.15</td>
<td>-0.33</td>
<td>-0.19</td>
<td>0.03</td>
<td>0.13</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.01</td>
<td>0.32</td>
</tr>
</tbody>
</table>

\(^a\)Correlations > 0.15 are significant at \(p < 0.01\).
\(^b\)The dependent variable is coded as follows: 0 = Nonequity; 1 = JV; 2 = WOS.
telecommunications commitments to which the country has ascribed.

Even in the most developed countries, governments strictly limited entry into telecommunications markets prior to the 1980s (Doh 2000). We control for local regulatory policy using an ordinal variable, Regulatory Policy, that takes on the value 0 for states where local telecommunications firms are monopolists, value 1 where there is partial deregulation and value 2 where there is full competition. Our measure is drawn from TeleGeography (2000), a telecommunications research firm.

A basic concern in any partnering decision is the potential loss of proprietary technology (Delios and Beamish 1999). The level of technological sophistication associated with a project is measured via a dichotomous variable Technology based on World Bank/PPI information, where 0 indicates standard and undifferentiated technology based on coaxial cable and 1 advanced technology. Further, government participation in infrastructure projects can protect its partners from bureaucratic holdup or, alternatively, impede the project (Murtha 1991). The variable State Participation is measured as the percentage of equity in an entering firm owned by the state. We also control for project size. Project size is measured in millions of 1998 inflation-adjusted dollars.

We also account for the influence on entry that may result from constraints or characteristics related to the entering firms. We include a measure of home-country corruption to account for the home-country norms or standards regarding corruption. The WBES does not measure corruption in many developed countries from which most FDI flows, so we use Transparency International’s CPI. In addition, we include a dummy variable for U.S. firms. U.S. firms account for more projects than any other country, and differ from their counterparts from other countries in that they are bound by a country-level prohibition against engaging in corruption (i.e., the U.S. FCPA), which may exert an independent effect on entry-mode choice. Finally, we include a measure of the experience of entering firms in international telecommunications projects previously engaged in by the entering firm (Delios and Beamish 1999).

Results

Table 1 reports the means, standard deviations, and correlations of all variables used in our analysis. Consistent with theories of macroeconomic development and numerous studies (cf. LaPorta et al. 2000, Easterly 2000), Per capita GDP is strongly positively correlated with the openness to competition of telecommunications markets (Regulatory Policy and WTO Commitments) and negatively related to measures of both dimensions of corruption. The measure of corruption arbitrariness is strongly negatively correlated with competition in telecommunications markets.

Table 2 presents the results of a multinomial logistic regression analysis for the trichotomous entry-mode dependent variable. Regression coefficients in Table 2, Models 1 through 3, reflect the influence of the independent variables on the choices between a joint venture with a local partner (the comparison group), nonequity, and wholly owned subsidiary entry modes. Results are essentially identical if the nonequity mode is compared to wholly owned entry (Model 4A). Model 1 displays the results for the regression with controls only; Model 2 introduces the two dimensions of corruption, Pervasiveness and Arbitrariness; and Model 3 introduces the interaction term between the two dimensions. Model 4 shows the full model, but with wholly owned subsidiary as the comparison group. Measures of pervasiveness and arbitrariness have been centered to address possible collinearity issues. Consequently, the interpretation of regression coefficients on our dimensions of corruption corresponds to the effect when the other dimension is at its average. The increases in the pseudo R-square and chi-square measures indicate the greater explanatory power of the models that include the measures of corruption.

Hypothesis 1A argues that as pervasiveness rises, MNEs are more likely to choose nonequity over equity modes. Model 2A in Table 2 compares nonequity with joint venture as the comparison group; Model 4A (which also includes the interaction term) compares nonequity with wholly owned subsidiary as the comparison group. The signs on pervasiveness are positive and significant in both cases, providing support for Hypothesis 1A. Hypothesis 1A argues that as arbitrariness rises, MNEs are more likely to choose nonequity over equity modes. The coefficient on arbitrariness in Models 2A and 4A, however, is not significant; thus, Hypothesis 1B is not supported.

Hypothesis 1C argues that pervasiveness and arbitrariness have a multiplicative impact on the nonequity versus equity-mode choice, strengthening the preference for the nonequity mode. The sign on the interaction term in Models 3A and 4A provides support for this hypothesis. As indicated by the changes in pseudo R-square and chi-square measures in Models 2, 3, and 4, pervasiveness of corruption and the interaction between the two dimensions add significantly to the explanatory power of the model.

Hypotheses 2A, 2B, and 2C restrict the comparisons to cases where the MNE chooses an equity mode, either a joint venture or a wholly owned subsidiary. Model 3B and Model 4B, which is the inverse of 3B, provide this comparison. Hypothesis 2A argues that as pervasiveness increases, the MNE is more likely to choose a wholly owned subsidiary than a joint venture. The coefficient
on pervasiveness in Models 3B and 4B is, however, not significant; thus, Hypothesis 2A is not supported. On the other hand, Models 3B and 4B do provide support for Hypothesis 2B; the MNE prefers a joint venture over a wholly owned subsidiary when arbitrariness is high. The insignificant coefficient for the interaction term in Models 3B and 4B indicates that Hypothesis 2C is not supported.

The significant coefficients for the WTO commitments variable suggest that equity entry via joint ventures is more likely where countries have acceded to a relatively high number of the WTO’s openness and investment requirements. Finally, the coefficients of the political risk and experience variables suggest that higher political risk and prior participation in telecommunications projects, respectively, increase the likelihood of entry via joint venture with a local partner over entry via wholly owned subsidiary.

### Discussion and Conclusion

The rapid integration of emerging and transition economies into the global trading and investment system increasingly exposes MNEs to severe corruption, an interaction that has rarely been addressed in the management literature. We propose and find evidence that one way firms cope with corruption is adaptation of the foreign entry mode, a critical element of MNE strategy. Further, we provide evidence that a refined view of corruption adds to the understanding of the implications of corruption for firms.

In particular, we find that firms engage in nonequity rather than equity-entry modes as they enter countries with higher pervasiveness of corruption. Also, the combination of this dimension of corruption with arbitrariness decreases equity entry. While previous research has found that the level of corruption reduces FDI (Habib and Zurawicki 2002, Mauro 1995, Smarzynska and Wei 2000), we present evidence that firms sometimes adapt to corruption not by avoiding entry altogether, but by choosing nonequity entry instead. Nonequity entry provides an opportunity for firms to participate in economies where corruption is high, while avoiding some of the costs of corruption. The results regarding pervasiveness suggest that this dimension of corruption represents not just another tax on entry, but is also an environmental threat to firms, unlike the more limited effect suggested in Shleifer and Vishny (1993) and Wei (1997). Moreover, our findings indicate that corrupt governments create informal restrictions to foreign ownership in addition to deterring FDI via legal restrictions to foreign ownership (Delios and Beamish 1999, Delios and Henisz 2000, Rajan and Zingales 2003).

The findings regarding pervasiveness further support the predictions of some institutional theorists who argue that the different institutional environments faced

### Table 2 Results of Regressions for Mode of Entry for Foreign Firms

<table>
<thead>
<tr>
<th>Entry mode</th>
<th>1A Nonequity</th>
<th>1B Wholly owned subsidiary</th>
<th>2A Nonequity</th>
<th>2B Wholly owned subsidiary</th>
<th>3A Nonequity</th>
<th>3B Wholly owned subsidiary</th>
<th>4A Nonequity</th>
<th>4B Joint venture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita GDP</td>
<td>-6.76**</td>
<td>-0.03</td>
<td>-8.77**</td>
<td>-1.11**</td>
<td>-10.56**</td>
<td>-0.98**</td>
<td>-10.59**</td>
<td>0.98**</td>
</tr>
<tr>
<td>Total GDP @ PPP</td>
<td>2.32**</td>
<td>-0.06</td>
<td>2.96**</td>
<td>0.57**</td>
<td>3.29*</td>
<td>0.49*</td>
<td>2.80*</td>
<td>-0.49*</td>
</tr>
<tr>
<td>Regulatory policy</td>
<td>-0.03</td>
<td>-0.20</td>
<td>-0.04</td>
<td>-0.44</td>
<td>-0.19</td>
<td>-0.35</td>
<td>0.43</td>
<td>0.35</td>
</tr>
<tr>
<td>Political risk</td>
<td>0.23</td>
<td>-1.24**</td>
<td>0.23</td>
<td>-1.48**</td>
<td>0.85</td>
<td>-1.48**</td>
<td>1.44</td>
<td>1.48**</td>
</tr>
<tr>
<td>FDI restrictions</td>
<td>-1.22</td>
<td>-0.36</td>
<td>-0.90</td>
<td>-0.38</td>
<td>-0.49</td>
<td>-0.47</td>
<td>-0.96</td>
<td>0.47</td>
</tr>
<tr>
<td>WTO commitments</td>
<td>-0.47***</td>
<td>-0.14**</td>
<td>-0.71***</td>
<td>-0.20***</td>
<td>-0.66**</td>
<td>-0.20**</td>
<td>-0.66**</td>
<td>0.20***</td>
</tr>
<tr>
<td>Project size</td>
<td>-0.81</td>
<td>-0.08</td>
<td>-0.95</td>
<td>-0.11</td>
<td>1.53</td>
<td>-0.11</td>
<td>1.53</td>
<td>0.11</td>
</tr>
<tr>
<td>Technology</td>
<td>-0.76**</td>
<td>-0.84**</td>
<td>-1.15*</td>
<td>-1.18**</td>
<td>-2.11</td>
<td>-1.19**</td>
<td>-0.92</td>
<td>1.19**</td>
</tr>
<tr>
<td>State participation</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
<td>0.01</td>
<td>0.03</td>
<td>0.01</td>
<td>0.02</td>
<td>-0.01</td>
</tr>
<tr>
<td>U.S. firm</td>
<td>-0.44</td>
<td>-0.18</td>
<td>-0.26</td>
<td>-0.21</td>
<td>-0.53</td>
<td>-0.12</td>
<td>-0.36</td>
<td>0.12</td>
</tr>
<tr>
<td>Home country CPI</td>
<td>-0.12</td>
<td>0.16**</td>
<td>-0.06</td>
<td>0.13*</td>
<td>-0.14</td>
<td>0.12</td>
<td>-0.25</td>
<td>-0.12</td>
</tr>
<tr>
<td>Experience</td>
<td>-0.09</td>
<td>-0.82***</td>
<td>-0.21</td>
<td>-0.87***</td>
<td>-0.25</td>
<td>-0.92***</td>
<td>0.67</td>
<td>0.92***</td>
</tr>
<tr>
<td>Pervasiveness</td>
<td>0.75**</td>
<td>-0.31</td>
<td>1.39**</td>
<td>-0.03</td>
<td>1.40**</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrariness</td>
<td>-0.01</td>
<td>-1.01**</td>
<td>-0.09</td>
<td>-0.96**</td>
<td>1.96</td>
<td>0.96**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pervas. + Arbit.</td>
<td>2.84*</td>
<td>0.40</td>
<td>2.44*</td>
<td>-0.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. Joint venture is the comparison group in Models 1–3, wholly owned subsidiary in Model 4.

*p < 0.05; **p < 0.01; ***p < 0.001.
by an MNE’s subsidiaries create institutional pressures between local adaptation requirements and internal norms. Rosenzweig and Singh (1991), Westney (1993), and others have suggested that institutional distance, i.e., differences among regulatory, normative, and cognitive institutions in various countries in which MNEs operate (Kostova and Roth 2002, Scott 1995, Xu and Shenkar 2001), creates firm-internal institutional conflict. Our results indicate that MNEs may overcome such conflict via nonequity entry. Because pervasiveness in itself may have little direct effect on transaction costs—and thus entry-mode decisions—transaction costs are unlikely to drive this finding.

However, pervasiveness raises the uncertainty associated with a given level of arbitrariness and so the interaction between the two dimensions has a significant effect on decisions between nonequity- and equity-entry modes. Pervasiveness seems to aggravate the problems raised for firms by the arbitrariness of corruption. The nonsignificant coefficients for arbitrariness in the choice between nonequity and equity entry support Oliver (1991), who deviates from other institutional theorists by suggesting that uncertainty reduces the perceived economic and legitimacy gains from compliance with institutional pressures, thereby decreasing the likelihood of compliance.

Our findings indicate that firms that enter via equity modes prefer joint ventures over wholly owned subsidiaries in corrupt environments, but only where arbitrariness is high. As we hypothesized, arbitrariness increases the likelihood that firms entering via FDI engage in joint ventures to overcome the problems associated with managing a foreign subsidiary in a corrupt host country.

The relationship of pervasiveness to wholly owned entry does not support prior conceptual work, which suggests that compliance with the practices of corruption might reduce the need for partnering. For instance, Boddewyn and Brewer (1994) proposed that firms might overcome the typical entry and postentry operational and strategic problems by acquiring the goodwill of government officials. Also, firms might reduce the risk of government intervention if they are able to co-opt officials through engagement in corrupt transactions (Ring et al. 1990), thereby reducing the need for a partner. Where corruption is highly pervasive, Rodriguez et al. (2005) suggest that firms might acquire legitimacy by acquiring government consent through their compliance with local corruption. Given that firms entering a corrupt country via FDI have accepted the challenges to their internal legitimacy, therefore, firms might view pervasive corruption as an opportunity. However, we do not find a main effect for pervasiveness, and thus also not for the moderation effect predicted in Hypothesis 2C. Possibly, for ethical or legal restrictions such as the FCPA in the United States, MNEs may not be willing to exploit the opportunities created when corruption is pervasive. Alternatively, accessing opportunities created by corrupt officials is harder than the above theoretical work has anticipated, and therefore this nonsignificant finding is notable. Also, foreign entrants may not have the capabilities necessary to take advantage of corruption.

Another possibility is that there may be underlying constructs behind pervasiveness that have conflicting effects on the firm’s choice between joint venture and wholly owned subsidiary. Eden and Miller (2004) argue that weak and missing institutions are the key drivers behind government corruption. The authors hypothesize that high pervasiveness, driven by weak regulatory institutions, encourages the MNE to choose a wholly owned subsidiary; whereas high pervasiveness, driven by weak normative institutions, encourages the choice of a local joint venture partner. Thus, the type of institutional weakness may provide another explanation for the nonsignificance of Hypothesis 2A. Further exploration of institutional underpinnings of the arbitrariness and pervasiveness of corruption is an important next step for corruption researchers.

A more general contribution of this study is an appreciation of the utility that may be gained by distinguishing between the two dimensions of corruption. Each dimension independently affects entry mode and thereby individually contributes to our understanding of MNE strategy in response to corruption. To support the value of our two-dimensional view of corruption we performed several post hoc estimations substituting single-index measures of corruption for our two-dimensional construct in our multinomial logit regressions. Specifically, we substituted the Transparency International CPI and the WBES’s measure of the “general constraint of government corruption on business” for our measures. Neither the TI nor the WBES measure was a statistically significant predictor of firm’s choice among the three entry modes in our sample. Regression coefficients on both single-index measures are only significant at or above the 10% level in logit regressions where the dependent variable reflects the simpler binary choice between nonequity and all forms of equity entry. This finding comports with extant studies that use single-index measures to establish the influence of corruption on aggregate FDI flows and supports our argument for the use of finer measures to examine entry mode and other firm-strategic choices in light of corrupt host environments.

Theoretically, our differentiation of the two characteristics of corruption sheds light on the effects of corruption on the institutional environment. While the direct transaction-cost implications of the pervasiveness of corruption are limited, pervasiveness is still important for the entry decision because a subsidiary is part of a network of organizations that propagates and reflects internal institutional pressures. Moreover, we find strong
evidence of the interactive effect of the dimensions on entry mode. Even low pervasiveness of corruption may create significant challenges for firms if arbitrariness is high.

The results of this research also have implications for the discussion of corruption in the field of economics. First, it suggests that it is in the interest of MNEs to encourage a reduction of corruption, not only because corruption reduces growth, but also because corruption creates substantial costs that fall heavily on foreign firms. Because corruption creates barriers to foreign entry, it poses challenges to foreign firms relative to local ones, putting the foreign firm at a disadvantage. Second, whereas previous research holds that corruption reduces FDI, and thus technology transfer to emerging countries (Grossman and Helpman 1991), the literature does not address the possibility of such technology transfer through nonequity entry, which our research suggests may compensate for this effect.

Despite its strengths, this study is limited because we examine only one industry: telecommunications. While single-industry studies have significant advantages, they may inhibit generalization. For instance, telecommunications projects—and infrastructure projects more generally—involves more interaction with government agencies and, thus, a higher potential for encountering corruption. Consequently, our results may be overstated in relation to firms in other industries. At the same time, considering telecommunications FDI has the advantage of focus on one specific host country; the services created by a telecommunications investor cannot subsequently be exported to other countries, thus providing a clear linkage to host-country conditions. Further, by focusing on one industry we avoid the need to control for the differing levels of influence governments accord across industries. Finally, the challenges faced in the telecommunications industry are indicative of those confronted in infrastructure industries more broadly, including electric power, transportation, water, and oil and gas. Historically, infrastructure investments constitute by far the largest share of private investment in developing countries, and there is reason to believe that other infrastructure sectors, such as power and water, feature similar characteristics and constraints as telecom. Indeed, telecommunications has been identified as the “flagship” industry in private infrastructure in emerging economies (Kambhato 1998), and as such may set the precedent for future developments in these other sectors. We hope that our findings contribute to the development of a robust research agenda and spur heightened attention by governments, investors, and managers to the important phenomenon of corruption.

Acknowledgments
The authors thank the Shell Oil Company Foundation for funding and gratefully acknowledge helpful comments from Albert Cannella, Witold Henisz, Haiyang Li, Hildy Teegen, Asghar Zardkoohi, seminar participants at the University of Montana and Washington State University, Senior Editor Javier Gimeno, and three anonymous reviewers.

Appendix. Pervasiveness and Arbitrariness Measurement Items
Items are given verbatim and factor loadings are provided (scores in bold included in that item)

<table>
<thead>
<tr>
<th>Items</th>
<th>Pervasiveness</th>
<th>Arbitrariness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do firms in your line of business typically need to make extra, unofficial payments to public officials to…</td>
<td></td>
<td></td>
</tr>
<tr>
<td>… get licenses or permits to expand or operate your business?</td>
<td>0.86</td>
<td>−0.02</td>
</tr>
<tr>
<td>… deal with the settlement of taxes?</td>
<td>0.62</td>
<td>0.11</td>
</tr>
<tr>
<td>… gain government contracts?</td>
<td>0.89</td>
<td>0.10</td>
</tr>
<tr>
<td>… deal with customs services?</td>
<td>0.78</td>
<td>0.02</td>
</tr>
<tr>
<td>… deal with courts or judges?</td>
<td>0.59</td>
<td>0.09</td>
</tr>
<tr>
<td>… deal with law enforcement agencies?</td>
<td>0.55</td>
<td>−0.01</td>
</tr>
<tr>
<td>Do firms in your line of business usually know in advance how much an unofficial payment for government services will be?</td>
<td>−0.01</td>
<td>0.73</td>
</tr>
<tr>
<td>If a firm pays the required unofficial payment to a particular government agent may another government agent also require an unofficial payment for the same service?</td>
<td>−0.03</td>
<td>0.66</td>
</tr>
<tr>
<td>If a firm pays the required unofficial payment, is the government service usually delivered as agreed?</td>
<td>−0.05</td>
<td>0.81</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>3.61</td>
<td>2.39</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>0.94</td>
<td>0.78</td>
</tr>
</tbody>
</table>

Endnote
1 An implicit assumption of the multinomial logit (MNL) regression is the independence of irrelevant alternatives (IIA). In our model, IIA implies that the choice between the two equity-entry alternatives is independent of the nonequity-entry alternative. We employed two techniques to test the potential bias that may result from IIA, both of which strongly support our use of MNL. First, we estimated a Heckman sample selection model where the selection variable was the choice of equity entry. This model’s results were nearly identical to our MNL results. Second, we ran a Hausman test on the results of our MNL model to directly test whether IIA was inappropriate. The results of the Hausman test also strongly supported our use of MNL. Details on these estimations and tests are available from the authors.
References


Uhlenbruck et al.: The Impact of Corruption on Entry Strategy


