Asymmetric effect of institutional distance: MNE subsidiaries’ bribery in transition economies

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Abstract: I examine how the corruption distance affects MNE subsidiaries’ bribing patterns in 24 transition economies. This study challenges the conventional conceptualisation of institutional distance in prior research by adopting asymmetric features of corruption distance. The study finds that the higher the corruption difference, the less likely an MNE subsidiary is to bribe government officials when the subsidiary comes from less corrupt countries, but the more likely the subsidiary is to bribe when it comes from more corrupt countries than the host countries. It indicates that the distance effect of corruption distance is not symmetric but asymmetric.

Keywords: corruption; institutional duality; distance; multinational enterprise subsidiaries; MNE; transition economies.


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1 Introduction

Institutional distance has been considered as an intrinsic issue in international business when multinationals go abroad. For decades, scholars have investigated this crucial topic with the questions of how multinational enterprises (hereafter MNEs) are contextually constituted across countries and how such contextual differences impact MNEs’ strategy and behaviour.

Past research suggests that differences in institutional contexts between the home and the host countries would significantly affect MNEs’ success or failure in the host countries. Various dimensions and consequences of institutional distance have been defined and examined. In fact, MNE subsidiaries confront a various set of institutional distance such as economic, political, legal, and cultural ones (Ghemawat, 2001; Hillman and Wan, 2005; Roth and Kostova, 2003; Westney, 1993), suffer from the liability of
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foreignness (Hymer, 1960; Zaheer, 1995; Kostova and Zaheer, 1999) and further lie under the tension of compliance to either the home country or the host country institutional pressures (Eden and Miller, 2004; Gaur and Lu, 2007; Kostova and Roth, 2002; Rosenzweig and Singh, 1991; Westney, 1993). Prior empirical studies also show an association between a single dimension or a set of distance and MNEs’ strategic decision-making such as entry mode choice, location selection, and performance (Evans and Mavondo, 2002; Gaur and Lu, 2007; Henisz and Delios, 2001; Kogut and Singh, 1988).

As research on institutional distance has matured, recent scholarship seeks the common ground for taking stocks and raises constructive critiques for moving forward (Shenkar, 2001; Bae and Salomon, 2010). This study intends to extend or to complement such efforts by highlighting asymmetric features of institutional distance in both conceptual and empirical way. Prior research, in general, assume a negative implication of distance such that the farther institutional distance goes, MNEs suffer more from a deepened liability of foreignness in their host country operation. Here, I question the notion that distance would always be negative to do a business in a foreign context. As Shenkar (2001) criticised as the illusion of symmetry, distance impact would be asymmetric in the sense that the distance from country A to country B may not be identical to the distance from country B to country A. Therefore, I argue that the direction of distance would be considered for a clear distinction between the home and the host country effects. Further, the concept of distance would also incorporate direction of institutional difference. Traditional construct of institutional distance implies absolute values of institutional differences across countries, which assumes that positive deviations across countries on an institutional dimension are equivalent to negative deviations on that dimension (Bae and Salomon, 2010). However, although absolute distance is similar, a positive difference of institutional distance would be differential from a negative difference. Such conceptual elaboration of institutional distance contributes to clarify real effect of institutional distance on MNEs’ managerial behaviour and to invite a rigor in empirical testing in this line of research.

To test my arguments, I adopt the context of transition economies and MNEs’ bribing behaviour in those countries. In transition countries, MNE subsidiaries are under dual conflicting pressures from dissimilarity of institutions between the home and the host countries, which significantly affect their bribing behaviour. In this study, I examine the very crucial question of:

1. how the level of distance in corruption induces MNE subsidiaries’ bribing behaviour
2. given recognition of asymmetric aspect of corruption distance, how differentially such asymmetric nature of corruption distance affects MNE subsidiaries bribing behaviours
3. under which condition, if any, such differentials would be held valid.

Resorting to institutional theory and organisational learning theory, in the next section, I conceptualise my theoretical arguments and develop hypotheses concerning isomorphic pressure which MNE subsidiaries confront to engage in bribing practices in their host countries. Then, I summarise the methodology and data, present the results of my analysis, and end by discussing implications for theory and practice.
2 Theory and hypotheses development

Existing literature on institutional distance provides invaluable insights on how firms operate in multiple institutional environments since the advent of MNEs. Hymer (1960) raised the issue of cost of doing business abroad by MNEs and recognised liability of foreignness such as information disadvantage and discriminatory treatments in the host countries. Since then, scholars have paid attention to institutional distance by exploring the tension between isomorphic pressures from the host country environments and global integration within the MNE network (Doz and Prahalad, 1984; Ghoshal and Bartlett, 1990; Rosenzweig and Singh, 1991; Zaheer, 1995, 2002). In particular, Rosenzweig and Singh (1991) incorporate an institutional perspective of the MNE to explain institutional distance and the dual pressures MNEs face. Further, Westney (1993) explicitly theorises the institutional view of MNEs that MNEs straddling different institutional environments engender the emergence of innovation when the conflicting isomorphic pressures in the home and host countries produce new structures and processes.

Recent studies advance my understanding to interaction between institutional environments and their distance and MNEs’ strategic decisions at the subsidiary level, which is the focus of the study. These works begin to develop the concept of ‘institutional distance’, defined as the degree of difference across the institutional profiles of the host and the home countries, and its impact on MNE subsidiaries (Gaur and Lu, 2007; Kostova, 1996, 1999; Kostova and Roth, 2002; Spencer and Gomez, 2011). Since the seminal work on cultural distance by Kogut and Singh (1988), the dimensions of institutional distance have been much further diverged into political, regulatory, economic, and cognitive ones (i.e., Gaur and Lu, 2007; Miller and Parkhe, 2002; Nachum et al., 2008; Xu et al., 2004). This study attempts to contribute to this line of research by challenging the current conceptualisation of institutional distance in which it is considered as symmetric and ignored the anchoring and the sign differences in institutional distance.

2.1 Institutional distance and corruption

Rooted in institutional theory of MNEs, this study extends extant literature conceptually and empirically by adopting corruption as a context of institutional duality. Here, institutions refers to the humanly devised schemas, norms, and practices that enable and constrain the behaviour of social actors and make social life predictable and meaningful (North, 1990; Powell and DiMaggio, 1991; Scott, 2001). Institutional duality refers to a multitude of different and possibly contradictory institutional norms and practices in the environments in which MNE subsidiaries operate (Kostova, 1999; Kostova and Roth, 2002; Westney, 1993). When it comes to MNEs, subsidiaries of MNEs face institutional distance between dual institutions from a home and a host country (Kostova and Zaheer, 1999; Rosenzweig and Singh, 1991). In particular, MNE subsidiaries, while physically operating in host countries, are not independent from the headquarters; thus, MNE subsidiaries have to comply not only with the host country institutions, but also with the home country institutions. As a result, such MNE subsidiaries confront dual institutional pressures, suffer from institutional distance, and consequently struggle to maintain both internal and external legitimacy (Kostova and Roth, 2002).

This study adopts corruption as a primary context for institutional duality and distance. Here, corruption is defined as public corruption that refers to the abuse or
misuse of the position or resources for private gains, which occurs between firms and government officials (Shleifer and Vishny, 1993; Collins et al., 2009). I feature corruption as a rule of a game as well as a business practice in transition economies. Like other institutions, corruption can be institutionalised as a rule of a game in transition countries; in this case, corruption is a bad institution and functions as an informal normative institution (Calhoun, 2002; El Said and McDonald, 2002; Eden and Miller, 2004).

Under this context, I investigate the issue of how such dual pressures of corruption and their distance between the home and host countries would affect MNE subsidiaries’ bribing behaviour. In order to isolate the pure impact of corruption distance, I begin with examining the host country impact of corruption environment.

### 2.2 The host country impact of corruption on subsidiaries’ bribing behaviour

In an environment in which corruption is prevalent and taken for granted, even when corrupt behaviours would not add to efficiency at the societal level, a firm would be better off to bribe since bribery can provide a better access to necessary resources to which the firm would not be able to gain access otherwise (Murphy et al., 1993). A higher level of corruption in a country may reflect a situation in which corruption is more deeply ingrained and institutionalised. Therefore, in a country in which corruption is prevalent, corrupt behaviour can be viewed as a more accepted way of doing business. Under this high level of corruption environment in the host countries, MNE subsidiaries tend to engage in bribing behaviours in order to avoid the liability of foreignness and to obtain economic gains or legitimacy in the host countries (Dunning, 2004; Zaheer, 1995).

Recently, however, Rodriguez et al. (2005) suggested that corruption is a two-dimensional concept; examining only one dimension fails to provide a full picture of corruption. The authors contend that an aggregate index cannot capture the complex nature of corruption across countries. For instance, although both India and Indonesia suffer from high levels of corruption, the authoritarian regime in Indonesia is known for a more systemic and predictable corruption than that of India (Lee and Oh, 2007; Rodriguez et al., 2005; Uhlenbruck et al., 2006). According to this rationale, the authors suggest two dimensions of corruption: pervasiveness and arbitrariness. Pervasiveness of corruption is defined as how much corruption pervades business activities in dealing with government officials; arbitrariness of corruption is the amount and interval unpredictability of effective bribery to government officials (Rodriguez et al., 2005; Wei, 1997).

Since pervasiveness of corruption weakens the hazards of institutional and legal sanctions (Sun, 1999), in choosing to bribe, a firm may – without much trouble – comply with the institutional norms and practices of corruption. As such, when corruption is highly pervasive in business environments, it is less costly for a firm to actively involve itself in bribery. In other words, in an environment in which the pervasiveness of corruption is high, the cost of involving in corrupt behaviours diminishes because corruption, being pervasive, is less of a secret. Accordingly, the conformity pressures for corrupt behaviours increase while the risk of bribing may decrease. Therefore, a firm may attain external legitimacy without much conflict. Furthermore, Murphy et al. (1993) argue that an increase in corrupt activities in a country makes corrupt behaviour more
attractive as bribers have strength in numbers. Therefore, the more corrupt a host country, the more likely an MNE subsidiary is to engage in bribery. Accordingly, I hypothesise:

Hypothesis 1a The higher the pervasiveness of corruption in the host country, the more likely an MNE subsidiary is to engage in bribery behaviours in the host country.

However, where corruption is arbitrary in the host countries, bribery payments are irregular, unpredictable, and typically ineffective (Shleifer and Vishny, 1993). Rodriguez et al. (2005) describe this situation as the inherent degree of uncertainty related to corrupt transactions in a given state. When the probability of gaining preferential treatment that a firm desires in exchange for bribery is unknowable, firms do not readily take the risk of bribing government officials. Under this kind of uncertainty, since corruption would be hardly institutionalised into routines or practices, firms are unlikely to attain legitimacy and secure economic benefits by engaging in corrupt behaviours (Campos et al., 1999; Oliver, 1991; Rodriguez et al., 2005; Shleifer and Vishny, 1993). Consequently, in an institutional environment in which corruption is arbitrary, it is very likely that the efficacy of bribery would not be guaranteed; thus, MNE subsidiaries would engage in bribery less often. In other words, it would be very costly to achieve a purposed benefit through bribery in the host countries in which the arbitrariness of corruption is high since the processes of corruption are less learnable and the benefits from bribing a government official would be uncertain. Thus, I propose:

Hypothesis 1b The higher the arbitrariness of corruption in the host country, the less likely an MNE subsidiary is to engage in corrupt behaviours in the host country.

2.3 Corruption distance and an MNE subsidiary’s engagement in bribing: distance and difference

A bribing pattern of MNE subsidiaries, however, is not solely driven by the host country corruption environment but also by the level and the nature of the home country corruption environment. Further, subsidiaries bribing behaviours are ultimately determined by the difference between the home and the host country corruption environment, corruption distance. The higher the difference in corruption distance is between the home and the host country, the higher the conflict is in MNE subsidiaries’ decision making on bribery since MNEs are unfamiliar and incompatible with corruption environments in the host countries.

In this context of corruption distance, however, impact of distance may not be symmetric but asymmetric, which means that direction of distance matters. Conventional concept of institutional distance simply contains absolute value of difference, but ignores an anchoring point of distance and equalises negative differences with positive ones between two countries. This study challenges such symmetric assumption of institutional distance and revitalises the notion of direction in institutional distance. Hereafter, I term ‘distance’ as absolute value of difference whereas I use ‘difference’ for containing both positive and negative differences in institutional distance.

For justifying the use of these two different terms, I conceptualise two different types of asymmetry in institutional distance. The first type is related to the anchoring issue of distance. The notion of distance assumes that the distance from country A to country B is
identical to the distance from country B to country A (Shenkar, 2001), which is not necessarily true. For example, according to the current concept of institutional distance, a Canadian firm investing in China would have the same institutional distance as a Chinese firm investing in Canada. Such an argument ignores the fact that a home country effect would be different from a host country effect in nature (Shenkar, 2001). The second type is associated with the sign of difference in institutional distance. Differently from the conventional usage of distance, I recognise that a positive difference in corruption distance is not identical to a negative difference in corruption distance between the home and the host countries. Although the absolute degree of corruption distance is the same, it is very likely that the bribing pattern of an MNE coming from more corrupt countries than the host country would be starkly different from one from less corrupt countries. In other words, the former has a comparative advantage to deal with corruption by virtue of prior knowledge and experience associated with corruption in the home country while the latter has a liability mainly due to unfamiliarity and relational hazards. Hypothetically, let us assume the corruption distance between the USA and Hungary, and that between Russia and Hungary is exactly same. However, the effects of these two identical corruption distances on MNE subsidiaries’ engagement in bribing may not be the same but substantially different.

**Figure 1** Asymmetric effects of institutional distance on bribing (see online version for colours)

For the purpose of illustration, a simplified context is used in Figure 1: two countries – A and Z – are the exact same distance from the host country C in terms of the level of corruption (see Figure 1). However, when it comes to the direction of distance (difference), country Z (e.g., Russia) is more corrupt than country C (e.g., Hungary) while country A (e.g., Germany or the USA) is less corrupt than country C. In such a case, an MNE from country Z has a differential effect of corruption distance on its size of bribery compared to that of country A. I call this the asymmetrical effect of institutional distance. For example, an MNE from Russia would be more familiar in dealing with foreign practices and norms regarding bribing in the host country, Hungary, than an MNE
from the USA, which may suffer a higher uncertainty from a liability of foreignness with respect to how to, to whom, and how much to bribe governmental officials.

If the subsidiary is coming from a more corrupt home country environment, it may bribe more since rather than suffering from the liability of foreignness in a host country (Hymer, 1960; Zaheer, 1995), these subsidiaries may enjoy the advantage of learning and political capabilities how to manage in a more corrupt environment, which they might have acquired in doing business in their home countries (della Porta and Vannucci, 2005; Holburn and Zelner, 2010; Kostova, 1999; Westney, 1993). Corruption literature indicates learning effects of corruption that the skills, knowledge, and information concerning the effective ways of creating, managing, and enforcing corrupt relations are acquired and accumulated over time (della Porta and Vannucci, 2005, della Porta and Pizzorno, 1996). That means engaging in corrupt behaviours depends not only on individual preferences or choices but also on institutional context and firms’ political capabilities (della Porta and Vannucci, 2005; Holburn and Zelner, 2010).

2.4 Corruption distance and difference: pervasiveness and arbitrariness

Corruption distance creates a conflict within an MNE subsidiary about which institution it should comply more. The greater the dual pressure of corruption, the greater the threat to internal legitimacy of an MNE subsidiary as it faces two sets of conflicting institutional pressures from the home and host country (Davis et al., 2000; Kostova and Roth, 2002; Rodriguez et al., 2005). In such a threat to internal legitimacy, MNE subsidiaries would be less likely to follow the host country institutions. When it comes to an MNE subsidiary from a more corrupt country than the host country, such effects of corruption distance are not symmetric, but asymmetric or even opposite. The greater the degree of pervasiveness of corruption in the home country compared to the host country, the less an MNE subsidiary is handicapped by a liability of foreignness from the unfamiliarity, relational hazards, and complexity of corruption. Since such a MNE subsidiary may be familiar with corruption given that home country is more corrupt than the host country and, therefore, can take advantage of its prior knowledge and experience to learn and adapt a distinct nature of corruption in the host country (Bonardi, 2004; Holburn and Zelner, 2010), it would be more likely to engage in corruption behaviours as necessary when compared to other foreign MNE subsidiaries from less corrupt countries. Extant corruption literature acknowledges the existence of learning effects in corrupt transactions. Subsidiaries exposed to corrupt practices in the host countries could leverage their prior skills, knowledge, and information concerning the effective corrupt methods for creating and managing corrupt relations into the host countries (della Porta and Vannucci, 2005; Holburn and Zelner, 2010). Acting repeatedly, subsidiaries discover through learn-by-doing processes how to act more effectively, reducing the risks and transaction costs of corruption (della Porta and Vannucci, 2005). Thus, I predict:

Hypothesis 2a The greater the degree of corruption difference in terms of pervasiveness between a home and a host country, the less likely an MNE subsidiary from a less corrupt country is to engage in bribery while the more likely an MNE subsidiary from a more corrupt country is to engage in bribery in a host country.

As the degree of institutional distance in arbitrariness of corruption between home and host countries increases, MNE subsidiaries confront higher levels of uncertainty.
Consequently, an MNE subsidiary tends to reduce such uncertainty by adopting more familiar and invested institutions, which are verified to be successful forms of institutions (DiMaggio and Powell, 1983; Hirsch, 1972). Similarly, past literature on FDI and the mode of entry asserts that MNEs tend to involve a relatively low resource commitment in higher levels of uncertainty and risks (Davis et al., 2000; Kim and Hwang, 1992).

In addition, it might be easier for an MNE subsidiary that possesses experience in managing in an environment of high arbitrariness of corruption in its home market to deal with the arbitrariness of corruption in a host country. On the other hand, for an MNE from an environment in which the arbitrariness of corruption is hardly a problem, it will be very difficult to deal with the novel environment in which the arbitrariness of corruption is high. Therefore, the effects of corruption distance in terms of arbitrariness would be asymmetric. That is, the greater the degree of corruption distance in terms of arbitrariness between the home and host country, the more likely the MNE subsidiary from a less corrupt country is to have difficulty in coping with a higher level of arbitrariness in the host country whereas the more likely the MNE subsidiary from a more corrupt country than a host country is to show a higher level of tolerance on uncertainty from arbitrariness of corruption and take advantage of its prior experience and knowledge to figure out a unique feature of corruption uncertainty in the host country. Accordingly, the following hypothesis is proposed:

Hypothesis 2b The greater the degree of corruption difference in terms of arbitrariness between a home and a host country, the less likely an MNE subsidiary from a less corrupt country is to engage in bribery while the more likely an MNE subsidiary from a more corrupt country is to engage in bribery in a host country.

As argued earlier, I suggest that corruption distance would be asymmetric rather than symmetric in its impact on MNE subsidiaries’ bribing behaviour. Therefore, I argue that a difference measure for corruption distance would capture more exact features of the relationship between corruption distance and subsidiaries’ bribery. By contrast, a distance measure for corruption distance would present a spurious or compounding effect since a negative and a positive difference are commingled into one direction of difference, absolute value of difference. Thus, I propose:

Hypothesis 3 The difference measure of corruption distance has more significantly negative relationship with an MNE subsidiary’s bribery than the distance measure has.

3 Methods

3.1 Data

To test these hypotheses, the research involved compiling a dataset from multiple sources using World Bank datasets: the Business Environment Enterprise Performance Survey (BEEPS), the World Business Environment Survey (WBES), the database of World Development Indicators (WDI), and the Governance Indicators (GI). The primary dataset for the main effects is based on the BEEPS survey, which was conducted through face-to-face interviews with firm managers or owners during on-site visits from June
through August 1999 in the 24 transition economies examined. This study limits the sample firms to MNE subsidiaries located in the transition economies that own at least some equity in the subsidiary in the host countries. From the total sample of 4,104 firms, all domestic firms were discarded, leaving a sample of 500 foreign subsidiaries. However, since the dependent variable is bribery payments, which is sensitive in many countries, the BEEPS dataset is missing many values; thus, the sample put into the regression for the full model includes 122 firms. All home and host countries included in this study are shown in Table 1.

To assess the representativeness of the sample, the final sample was compared to those excluded from the final sample using the Kolmogorov-Smirnov (K-S) two-sample test (Westphal and Bedner, 2005), which examines the difference of distributions between two samples in terms of features of distribution as well as central tendencies. No significant differences in distributions were identified between the two samples with respect to the control and main dependent variables examined in the study.

### Table 1 Countries in the sample and the corruption perceptions index (1999)

<table>
<thead>
<tr>
<th>Host countries</th>
<th>CPI 1999</th>
<th>Rank</th>
<th>Sample</th>
<th>Home countries</th>
<th>CPI 1999</th>
<th>Rank</th>
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<td>21</td>
<td>Austria</td>
<td>7.6</td>
<td>17</td>
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<td>95</td>
<td>13</td>
<td>Canada</td>
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<td>Denmark</td>
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</table>
Several archival datasets were also used for control variables and parts of independent variables. To capture the differential degree of corruption distance and difference in terms of pervasiveness and arbitrariness, the dataset was drawn from WBES, which includes survey data covering 81 countries in the world provided by the World Bank. The questionnaires used to gather the WBES data are the same as those used for the BEEPS data; in addition, the survey periods are identical, which facilitates their use in this study. WBES data are used to exploit comparable data for the nature of corruption, pervasiveness, and arbitrariness for all countries specified as the home and host countries in the BEEPS sample.

Data from other sources were obtained for control variables. The data of political stability came from Kaufmann’s political stability index, a standardised measure ranging from –2.5 to 2.5 that measures the perception of the likelihood of the government in power to be destabilised or overthrown by possibly unconstitutional and/or violent means (Kaufmann et al., 2003). The data for GDP and GDP per capita were obtained from the WDI database provided by the World Bank.

3.2 Dependent variable: amount of bribes paid to government officials

The intensity of corruption engaged is defined as a MNE subsidiary’s involvement in corrupt behaviours – namely, paying bribes. Corrupt behaviour is captured by the total amount of bribes paid annually by a firm to all government officials, measured as a percentage of the firm’s total annual sales. This proxy is based on the following BEEPS survey question: 'On average, what percentage of revenues do firms like yours typically pay per annum in unofficial payments to public officials?' The response is categorised into seven interval scales, from 1 to 7, corresponding to a range of 0 to more than 25%.

3.3 Independent variables and control variables

3.3.1 Levels and distance of pervasiveness and arbitrariness in corruption

This study incorporates two different types of corruption among government officials: pervasiveness and arbitrariness. Rather than treating corruption as a single dimension represented by an index for each country – as adopted by past research – the current study adopts these two distinct key dimensions of corruption (Rodriguez et al., 2005). Pervasiveness of corruption is measured by the extent of occurrence of corruption in a country, which indicates how much corruption pervades business activities in dealing with government officials. Pervasiveness is measured in four areas – namely, how often firms need to make extra and unofficial money payments to public officials:

1. to get licences and permits
2. to deal with taxes and tax collection
3. to deal with customs and imports
4. to deal with courts?
Arbitrariness of corruption is specified as a concept of unpredictability of effective bribery and the uncertainty of expected results realised. Arbitrariness is measured according to three aspects:

1. firms usually do not know in advance how much the ‘additional payment’ is
2. if a firm pays the required ‘additional payment’, the service is usually delivered as agreed
3. if a firm pays the required unofficial payment to a particular government agent, another government agent may also require an unofficial payment for the same service.

To account for the issue of directionality, the data from the second aspect are reversed. After performing a factor analysis to test the validity and reliability of these two constructs, the results indicated that the two latent variables – pervasiveness and arbitrariness – are independent of each other and can be used for the two idiosyncratic features of corruption of interest: pervasiveness and arbitrariness. (See Appendix for the survey questions used and results of the factor analysis.)

After extracting the level of pervasiveness and arbitrariness for each country, the extent of discrepancy of corruption in terms of pervasiveness and arbitrariness was measured by the differences between the pervasiveness and arbitrariness of corruption, respectively, between the home and the host countries. Following the seminal work by Kogut and Singh (1988), I computed institutional difference and distance of corruption as follows:

\[
\text{Difference} = (\pm) \sqrt{\frac{\sum (I_{i,\text{Host}} - I_{i,\text{Home}})^2}{V_i}},
\]

if \( \text{Host} \geq \text{Home} \), \( \text{Duality} = (\pm) \), if \( \text{Host} \leq \text{Home} \), \( \text{Duality} = (-) \)

\[
\text{Distance} = \sqrt{\frac{\sum (I_{i,\text{Host}} - I_{i,\text{Home}})^2}{V_i}},
\]

where \( I_{i,\text{Host}} \) and \( I_{i,\text{Home}} \) are the \( i^{th} \) dimension of corruption index for the host country and the home country respectively and \( V_i \) is the variance of the \( i^{th} \) dimension. Here, I have the two dimensions of corruption, pervasiveness and arbitrariness. Kirkman et al. (2006) criticised the use of the overall cultural distance index; thus, this study uses two indices from two distinct constructs of corruption rather than a single aggregate index.

This institutional distance is not an absolute value like distance measures; therefore, the data contain negative signs to indicate those cases in which the corruption in the home country is more pervasive or more arbitrary than that in the host countries. For example, in the case of Russia, the level of corruption is higher than many countries in transition economies.
3.3.2 Levels and distance of corruption using CPI to check robustness

For the robustness check, the representative index measure for the level of corruption is the corruption perceptions index (CPI), compiled in 1999 by Transnational International, which resembles the pervasiveness of corruption. CPI has been widely adopted as a representative measure for each country’s level of corruption in past research on corruption (Habib and Zurawicki, 2002; Robertson and Watson, 2004; Voyer and Beamish, 2004). It is a composite index using 16 different data sources, mostly based on local expert assessments, to rank over 150 countries from the most to the least corrupt on a scale of 0 to 10 (Transparency International, 1999, 2002, 2004, 2005), which is opposite direction to two dimensional corruption measures of pervasiveness and arbitrariness. To conduct a robustness check, this study’s measure of pervasiveness was replaced with CPI using the year 1999 as a reference so that all indices match up with the survey data captured from 1999 through 2000. Correspondingly, the dual pressure of corruption of pervasiveness is also operationalised as the degree of the difference between home and host countries in CPI. However, an index similar to the arbitrariness of corruption is not available; therefore, the robustness check replaced only the pervasiveness of corruption with CPI.

3.4 Control variables

A set of control variables was introduced based on prior research. By reviewing existing literature on corruption, several meaningful country-level control variables were identified. In previous studies, political stability (Wei, 2000) has been employed as a control variable to partial out country-level effects recurring as an association between economic and political development and the level of corruption in a country. To control for the political stability, this current study borrowed Kaufmann’s political stability index (Kaufmann et al., 2003), a standardised measure ranging from –2.5 to 2.5 that serves as one component of GI. Further, the GDP and GDP growth in 1999 were included to control for the economic wealth of the countries since a comprehensive theory and literature argued that the level of corruption is negatively associated with the economic development and growth (Ades and Di Tella, 1999; Campos et al., 1999; Demsetz, 1968; Klitgaard, 1988; Habib and Zurawicki, 2002; Mauro, 1995; Shleifer and Vishny, 1993; Voyer and Beamish, 2004; Wei, 2000). The 1999 GDP and GDP growth variables came from the World Bank’s WDI database.

Industry dummies are included in the regressions as control variables as well. Two categories of industries are used: manufacturing (coded as 1) and service (coded as 0). Firm size is measured by the number of employees in an MNE subsidiary, recoded into six categories: 1 (1–9 employees), 2 (10–49 employees), 3 (50–99 employees), 4 (100–199 employees), 5 (200–499 employees), and 6 (500 employees or more). This variable was included to isolate the size influence from the main effects with the rationale of presuming a relationship between the firm size and risk taking (Bloomstrom and Zejan, 1991). Moreover, firm age reflects the firm’s tenure since the founding of the subsidiary; 1999 serves as the reference year for when the survey was conducted. Since older firms are more familiar with the institutions of corruption, this variable controls for age.
Finally, export orientation, state ownership, and foreign ownership at the firm level are controlled for with the rationale that these factors could influence MNE subsidiaries’ corrupt behaviour. Export orientation represents the MNE subsidiary’s export percentage of its total sales; it measures the intensity of export by comparing exports to total sales. Foreign ownership denotes how much of the subsidiary’s share is owned by the MNE; this variable is operationalised as the percentage of foreign ownership share to total ownership share of a subsidiary. State ownership is the percentage of governmental shares in the total ownership of a firm; this has been widely used in past research on corruption as it can affect how much a firm wants to become involved in bribing government officials (Hellman et al., 2003; Milovanovic, 2002; Shleifer and Vishny, 1993).

4 Results

Descriptive statistics and Pearson correlation coefficients are presented in Table 2. Prior to conducting hierarchical multiple regression analyses, basic assumptions for the analyses were investigated, such as multicollinearity and heteroskedasticity. Variance inflation factors (VIF) for the variables in each model indicated no potential multicolinearity problems in the data in that no VIF was greater than 10; the maximum value of VIF was 3.06, and the mean was 1.76 (Chatterjee and Price, 1991; Neter et al., 1996). White’s (1980) test of heteroskedasticity also demonstrated no problems of heteroskedasticity. In addition, in order not to inflate the statistical confidence level when correlating the error terms across identical home and host countries, a regression was conducted, clustering these identical groups and providing White’s standard errors, which are robust to within cluster correlation. These standard errors allow observations in the same home country to be correlated.

Table 3 presents the results of the hierarchical regression analyses. Model 1 is the baseline model, comprised of the country-, industry-, and firm-level control variables. Model 1 controls for possible effects that can arise other than those from the main effects. Model 2 contains the main variables of types of corruption – pervasiveness and arbitrariness – in a host country to assess the host country effects on subsidiaries’ bribing behaviour. Model 3 includes institutional difference of corruption, while Model 5 compares the institutional distance of corruption with institutional difference of corruption in Model 3. Finally, for the robustness check, Model 7 replaces the level and distance of two types of corruption with a single index of corruption (i.e., CPI) and its distance.

The results indicate that all five models are statistically significant at least at the 0.01 level (Model 1: adjusted $R^2 = 0.18$, Model 2: adjusted $R^2 = 0.23$, Model 3: adjusted $R^2 = 0.32$, Model 5: adjusted $R^2 = 0.28$, Model 7: adjusted $R^2 = 0.21$). In Models 2 and 3, a substantial increase in the $F$ values ($F$ change in Model 2 = 3.82, $p < 0.001$ and in Model 3 = 3.35, $p < 0.01$) is evident, denoting that these variables improve the overall fit of the models. In other words, dual pressures of corruption and types of corruption are strong predictors of the amount of bribery paid. This largely confirms the argument that the level of corruption in host countries and the extent of discrepancy in dual corruption pressures between home and host country strongly impact the extent of the subsidiary’s bribery.
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
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<td>Bribing</td>
<td>3.21</td>
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<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
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<td>1</td>
<td></td>
<td></td>
<td></td>
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<td>GDP growth</td>
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<td>3.33</td>
<td>-0.01</td>
<td>0.09</td>
<td></td>
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<td>0.61</td>
<td>-0.28**</td>
<td>0.32***</td>
<td>-0.20*</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Industry (dummy)</td>
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<td>0.5</td>
<td>0.15</td>
<td>0.14</td>
<td>0.04</td>
<td>0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm age</td>
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<td>11.77</td>
<td>-0.11</td>
<td>0.12</td>
<td>-0.11</td>
<td>0.28**</td>
<td>-0.28**</td>
<td>1</td>
</tr>
<tr>
<td>Firm size</td>
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<td>-0.25**</td>
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<td>-0.05</td>
<td>0.03</td>
<td>-0.53***</td>
<td>0.29**</td>
</tr>
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<td>-0.20*</td>
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<td>-0.12</td>
<td>-0.02</td>
<td>-0.33***</td>
<td>0.14</td>
</tr>
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<td>0.5</td>
<td>-0.23*</td>
<td>0</td>
<td>-0.18†</td>
<td>0.23**</td>
<td>-0.21*</td>
<td>0.21*</td>
</tr>
<tr>
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<td>55.91</td>
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<td>0.18*</td>
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<td>-0.15†</td>
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<td>Corruption pervasiveness</td>
<td>3.76</td>
<td>1.17</td>
<td>0.37***</td>
<td>-0.08</td>
<td>0.08</td>
<td>-0.32***</td>
<td>0.12</td>
<td>-0.15</td>
</tr>
<tr>
<td>Corruption arbitrariness</td>
<td>2.99</td>
<td>1.1</td>
<td>-0.13</td>
<td>-0.01</td>
<td>0</td>
<td>0.05</td>
<td>-0.19*</td>
<td>0.09</td>
</tr>
<tr>
<td>Pervasiveness difference</td>
<td>0.46</td>
<td>0.51</td>
<td>0.1</td>
<td>-0.16†</td>
<td>0.08</td>
<td>-0.46***</td>
<td>0.03</td>
<td>-0.23*</td>
</tr>
<tr>
<td>Arbitrariness difference</td>
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<td>0.49</td>
<td>-0.03</td>
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<td>-0.02</td>
<td>0.05</td>
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<tr>
<td>Corruption index (CPI)</td>
<td>3.04</td>
<td>1.17</td>
<td>-0.20*</td>
<td>0.28**</td>
<td>-0.29**</td>
<td>0.85***</td>
<td>-0.03</td>
<td>0.32***</td>
</tr>
</tbody>
</table>

Notes: †p < 0.10, *p < 0.05; **p < 0.01; ***p < 0.001 (2-tailed), N = 122.
Table 3: Hierarchical regression with clustering home country

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
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<tr>
<td>GDP (ln)</td>
<td>1.570</td>
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<td>2.313</td>
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<td></td>
<td>(3.148)</td>
<td>(1.435)</td>
<td>(2.203)</td>
<td>(2.262)</td>
<td>(2.196)</td>
<td>(2.078)</td>
<td>(2.165)</td>
</tr>
<tr>
<td>GDP growth</td>
<td>-0.047</td>
<td>-0.022</td>
<td>-0.056</td>
<td>-0.058</td>
<td>-0.029</td>
<td>-0.043</td>
<td>-0.0131</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.022)</td>
<td>(0.036)</td>
<td>(0.033)</td>
<td>(0.028)</td>
<td>(0.029)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Political stability</td>
<td>-0.660**</td>
<td>-0.403**</td>
<td>-0.544†</td>
<td>-0.565</td>
<td>-0.479</td>
<td>-0.543†</td>
<td>-0.846*</td>
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<tr>
<td></td>
<td>(0.180)</td>
<td>(0.111)</td>
<td>(0.280)</td>
<td>(0.311)</td>
<td>(0.254)</td>
<td>(0.267)</td>
<td>(0.288)</td>
</tr>
<tr>
<td>Industry</td>
<td>0.001</td>
<td>0.053</td>
<td>-0.02</td>
<td>-0.023</td>
<td>-0.099</td>
<td>-0.021</td>
<td>-0.009</td>
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<tr>
<td></td>
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<td>(0.114)</td>
<td>(0.314)</td>
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<td>(0.350)</td>
<td>(0.368)</td>
<td>(0.103)</td>
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<td>Firm age</td>
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<td>0.001</td>
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<tr>
<td></td>
<td>(0.014)</td>
<td>(0.007)</td>
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<tr>
<td>Firm size</td>
<td>-0.130†</td>
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<td>-0.160**</td>
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<td></td>
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<td>(0.086)</td>
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<td>-0.445</td>
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<td></td>
<td>(0.325)</td>
<td>(0.279)</td>
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<td>(0.263)</td>
<td>(0.294)</td>
<td>(0.292)</td>
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<td>Export orientation</td>
<td>-0.260*</td>
<td>-0.237*</td>
<td>-0.193</td>
<td>-0.174</td>
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<td></td>
<td>(0.092)</td>
<td>(0.083)</td>
<td>(0.118)</td>
<td>(0.112)</td>
<td>(0.126)</td>
<td>(0.139)</td>
<td>(0.104)</td>
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<td>(0.002)</td>
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<td>(0.002)</td>
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</table>

Notes: Robust White (clustered) standard errors in parentheses. Significance tests are two-tailed. †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.
Table 3
Hierarchical regression with clustering home country (continued)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Corruption</td>
<td>Full model difference</td>
<td>Quadratic effect</td>
<td>Robustness check distance</td>
<td>Robustness check distance * Direction</td>
<td>Robustness check CPI measure</td>
</tr>
</tbody>
</table>
| Corrupti

Corruption measures

(H1a)

-0.242**

(0.066)

(0.084)

(0.090)

(0.107)

(0.086)

-0.109†

(0.054)

(0.092)

(0.090)

(0.084)

(0.081)

Corruption index (CPI)

0.258†

(0.133)

Duality measures

Pervasiveness difference

(H2a)

-0.517*

-1.181**

(0.208)

(0.272)

Arbitrariness difference

(H2b)

-1.068***

-0.961**

(0.172)

(0.152)

CPI duality

-0.047

(0.072)

Pervasiveness diff.-squared

0.629*

(0.170)

Arbitrariness diff.-squared

-0.394†

(0.210)

Notes: Robust White (clustered) standard errors in parentheses. Significance tests are two-tailed. †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.
### Table 3
Hierarchical regression with clustering home country (continued)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
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<th>Model 7</th>
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<tr>
<td>Robustness check</td>
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<tr>
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<td>(0.397)</td>
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<tr>
<td>Arbitrariness distance</td>
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<tr>
<td>Direction-pervasive distance</td>
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<td>0.320</td>
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<tr>
<td>(0.194)</td>
<td>(0.495)</td>
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<tr>
<td>Direction-arbitrary distance</td>
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<tr>
<td>Direction * Distance</td>
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<td>284</td>
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<td>R-squared</td>
<td>0.18</td>
<td>0.23</td>
<td>0.32</td>
<td>0.360</td>
<td>0.36</td>
<td>0.36</td>
<td>0.21</td>
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<td>F-change</td>
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<td>3.82***</td>
<td>3.35**</td>
<td>3.50***</td>
<td>2.73**</td>
<td>2.99**</td>
<td>2.77**</td>
</tr>
</tbody>
</table>

Notes: Robust White (clustered) standard errors in parentheses. Significance tests are two-tailed. †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.
4.1 Level of corruption in the host countries and MNE subsidiaries’ engagement in bribing

Models 2 and 3 tested how the nature of corruption and the distance of corruption differentially affect a subsidiary’s corrupt behaviours. Model 3 presents the fully specified model testing the effects of the types of corruption and institutional difference of corruption on a subsidiary’s corrupt behaviour. Hypothesis 1a proposed a positive relationship between the pervasiveness of corruption and the extent of an MNE subsidiary’s engagement in bribing. As predicted, the pervasiveness of corruption is positively associated with MNE subsidiaries’ bribery payments ($p < 0.01$). Therefore, Hypothesis 1a is supported. Hypothesis 1b proposed a negative relationship between the arbitrariness of corruption and the amount of bribery paid by an MNE subsidiary. As expected, the arbitrariness of corruption was negatively related and marginally significant; hence, the results lend moderate support to Hypothesis 1b.

4.2 Institutional difference of pervasiveness and arbitrariness of corruption

Hypothesis 2 proposed a negative relationship between the degree of difference in dual pressures of pervasiveness (2a) and arbitrariness (2b) of corruption and MNE subsidiaries’ bribing behaviours. As shown in Model 3, the relationship between the degree of difference in pervasiveness of corruption and bribery behaviours is both negative and significant ($p < 0.05$), which supports Hypothesis 2a. As predicted, the effect of the extent of dual pressures in arbitrariness of corruption on bribery payments is also negative and significant ($p < 0.001$), which supports Hypothesis 2b. Furthermore, the results indicate that the extent of difference between a home and a host country in terms of pervasiveness and arbitrariness of corruption has a quite greater explanatory power to predict MNEs’ bribery behaviours than the level of corruption in a host country in terms of pervasiveness and arbitrariness, respectively, has (standard coefficient $\beta$: pervasiveness, 0.218; arbitrariness, 0.001; pervasiveness duality, –0.517; arbitrariness duality, –1.068). In Model 3, the impact of arbitrariness of corruption lost its significance to predict the degree of an MNE’s bribing when the measures of corruption difference are added. Although the pervasiveness of corruption maintains its significance, it is also lowered. Different from difference measures, the measures of corruption distance are not significant or marginally significant to predict an MNE subsidiary’s bribing behaviour as shown in Model 5, which supports Hypothesis 3. The result indicates that the effect of corruption between the host and the home country would be asymmetric, rather than symmetric. Simple distance measures would fail to incorporate a direction effect. As the direction of corruption distance is added in Model 3 and Model 6, the direction measure, difference, enhances the model effectiveness and is marginally significant. In addition, Model 6 shows that the interaction effect of distance and direction, which is the same as the difference measure in Model 3, is significant and substantially improves the distance model in a complementary way.

Finally, several control variables are worth noting. Consistent with past literature on corruption, political stability indicated negative relationships with the amount of bribery paid by MNE subsidiaries. However, GDP and GDP growth do not prove to have a negative relationship with an MNE subsidiary’s bribery behaviours. In addition, the control variables for the subsidiaries and industry were either marginally significant or
failed to reach a significant level – except for firm size and export orientation, which were both negative and significant ($p < 0.01$ and $p < 0.05$ respectively) in Models 2 and 7.

4.3 Robustness checks for two-dimension construct versus single index measure

The robust checks involved replacing the measures of two types of corruption with the single index measure for the level of corruption (Transparency International’s CPI) from 1999. As shown in Model 7 in Table 3, on the one hand, the results are consistent in that both the CPI index and a pervasiveness of corruption have positive relationships with the extent of an MNE subsidiary’s engagement in corruption. On the other hand, however, this single index cannot replace the distinct construct of arbitrariness of corruption and should be a similar construct to the pervasiveness of corruption. In addition, the CPI duality of corruption has a similarly negative relationship with MNE subsidiaries’ bribery payments, but does not reach the significance level. These tests demonstrate that the current study’s findings on pervasiveness of corruption are robust and consistent with the results of the CPI as an alternative measure. Moreover, they indicate that the two-dimensional measure of corruption used in this study is more feasible for representing complex features of corruption in that arbitrariness of corruption can be interpreted as a unique dimension of corruption.

4.4 Post-hoc tests: curvilinear relationship of corruption distance and difference

Based on existing literature suggesting the marginal effect of corruption on the size of bribes (Fisman and Wei, 2004; Lee et al., 2010), possible quadratic effects of corruption duality may exist in pervasiveness and arbitrariness. Likewise, I examine the call by Shenkar (2001) such that the distance effects may not be linear and need to be empirically verified. The marginal effect of corruption duality likely tapers off at higher levels, which indicates that the shifts in the curve are subject to diminishing returns in response to higher degrees of corruption distance and difference.

As corruption difference of pervasiveness increases, a higher level of uncertainty from corruption difference of pervasiveness would be offset by a greater prevalence of corruption at the highest level of corruption pervasiveness in a host country. Thus, a U-shaped relationship is expected in which a threshold exists after which the negative effect of corruption difference of pervasiveness on bribing turns positive. However, corruption difference of arbitrariness would have a diminishing pattern of slope in its relationship with the size of bribes since the extreme level of arbitrariness of corruption still indicates a higher level of uncertainty, which means that no reflection point exists. As shown in Figure 2, the distance effects on bribing are not linear but curvilinear. The detailed shapes, however, are not similar. The difference effect of corruption pervasiveness has a threshold point in which a diminishing slope turns into a positive one. The difference effect of corruption arbitrariness on bribing also has a negative shape, but it has no tipping point and becomes much steeper since it indicates too many unpredictable risks. Model 4 tests these two curvilinear relationships and identifies the existence of a curvilinear relationship between corruption difference and the size of bribes.
5 Discussion

This study shows that the distance effect of corruption duality is not symmetric but asymmetric and not linear but curvilinear. The context of the study – transition economies – ideally substantiates the dual pressures of corruption as an important institutional environment; that is, when an MNE from a developed country enters into a transition economy, it perceives significant differences in terms of institutional norms and practices regarding corruption. First, as the baseline inquiry, H1 shows the effects of the home county environment in terms of the different nature of corruption; the pervasive corruption has a positive relationship with MNE subsidiaries engaging in bribes while arbitrary corruption has a negative one. Second, the results of H2 ascertain the asymmetric distance effect of corruption duality, in that MNEs from a more corrupt country bribe more when invested in a less corrupt host country than MNEs from a less corrupt country do, although the distance is exactly the same. More specifically, the results demonstrated how an MNE subsidiary’s bribery behaviours vary according to differential levels and direction of conflict of corruption distance.

Throughout this study, the results demonstrated that the degree of such corruption difference negatively influences bribery behaviours of MNE subsidiaries in host countries. Furthermore, such negative distance effects are not linear. Corruption duality of pervasiveness has a U-shaped relationship with an MNE subsidiary’s size of bribes, which denotes that a much greater uncertainty from corruption difference in terms of pervasiveness beyond a threshold point turns into a higher certainty, thereby inducing corrupt behaviours, which encourages MNEs to adapt the local institutional environments (Rosenzweig and Singh, 1991). Meanwhile, an asymmetric effect of corruption difference between the home and the host countries has been demonstrated in that MNEs
coming from less corrupt countries in terms of the level of corruption are less likely to engage in bribing while MNEs coming from higher levels of corruption are more likely to become involved in bribing government officials. Using the measures of corruption difference containing the connotation of both distance and direction, this study improved the explanatory power of an existing measure of distance. Once the concept of direction was added to the absolute value of distance between the home and host country, the results capture the asymmetric effects of institutional duality. Furthermore, by adopting two-dimensional constructs (Rodriguez et al., 2005) of the corruption of government officials rather than a uni-dimensional measure, this study demonstrated that duality differences in pervasiveness and arbitrariness of corruption are also negatively related to the amount of bribery paid to government officials.

It is also interesting that most of the subsidiary-level variables and industry controls were not significant. Perhaps in transition economies, where institutions are quite different from MNEs’ home countries, institutional differences are the most important factors affecting MNE subsidiaries’ behaviours. Particularly, since the focus of this study was corruption, it is possible that the differences may be much larger than among other kinds of institutions, such as legal, political, or market institutions.

5.1 Contributions

This study makes several contributions to the current literature. First, it sheds new light on the extension of prior research in the sense that the impact of corruption is determined not only by the host country’s institutions of corruption, but also by the degree of dual pressures of corruption between the home and host countries. Institutional distance literature is a rather new discovery, and dual pressures of corruption are quite novel. As Hillman and Wan (2005) assert, previous research highlights that MNE subsidiaries are subject to both external and internal legitimacy pressures, but it does not address the relative importance of each type of legitimacy. The present study attempted to fill this void by demonstrating how the relative difference between the home and host countries’ level of corruption may affect the bribery behaviours of MNE subsidiaries.

Second, the present study has expanded the previous research by explicating the two distinct concepts of duality: distance and difference (direction). Combining distance with direction, this study clearly demonstrated the asymmetric effects of corruption distance; for example, given the same distance from a host country in terms of corruption, an MNE subsidiary from a less corrupt country is less likely to engage in bribing while an MNE subsidiary from a country with a higher level of corruption is more likely to involve in bribing. This study advances the literature on institutional distance by explicitly capturing the features of distance and difference (direction) in the concept of institutional duality.

Third, using a unique and rare dataset regarding foreign MNEs’ bribing behaviours, this study expanded the extant country-level research on corruption into a more detailed unit of analysis, such as MNE subsidiaries. Since it is not easy to acquire subsidiary-level variables in bribe payments, past studies have failed to comprehensively examine corrupt behaviours of the MNE subsidiaries.

Finally, this study has made the first attempt to examine the distance of the two dimensions of corruption. Although many past studies examined the unilateral measure of the level of corruption, this study empirically showed that it is important to consider both the level and the predictability of corruption.
5.2 Limitations and future directions

This study also faced limitations and engendered potential opportunities for future research. First of all, since the primary source of datasets is secondary survey data, the analysis suffers from a limitation of data in the nature of missing values, sample size, constraints of variables, and limits of data manipulation. Furthermore, since bribing is sensitive and secret to firms, the dependent variable is collected by the question of ‘like your firm’ rather than ‘your firm’. This approach would be a better way to obtain reliable data (Bradburn et al., 2004). Moreover, since the dataset is confined to transition economies in Central and Eastern Europe, the study could be extended into other nations and regions for further generalisation of the findings. Second, the study does not demonstrate the dynamics of corruption per se or corrupt behaviours of MNE subsidiaries over time in host countries. Future research can conduct longitudinal studies to determine if MNE subsidiaries become more isomorphic to the host country institutions as they operate longer in the host market. In addition, while the current study could take advantage of the detailed data of MNE subsidiaries, it could not include any information on MNEs’ headquarters because such information was not included in the BEEPS survey. Although Eden and Miller (2004) argue that it is not the age of MNEs, but the duration of the subsidiaries spent in a host country that is associated with liability of foreignness, future research should consider the effects of headquarters’ control on the subsidiaries and the impact on corrupt behaviours.

6 Conclusions

I find that it is not only the distance of corruption between home and host countries per se that affects how much an MNE bribes when entering a host country, but also the direction of corruption distance. In other words, there exists asymmetry in bribing patterns depending on if the MNE is coming from a less or more corrupt countries. MNEs from a more corrupt country bribe more when investing in a less corrupt host country, while MNEs from a less corrupt country bribe less.

References


Asymmetric effect of institutional distance


Notes
1 I appreciate a reviewer’s comment on a possibility of curvilinear relationship. It would be an additional extension of the recent literature on the marginal effect of corruption.

Appendix

Construct validity: pervasiveness and arbitrariness of corruption

Table A1  Factor analysis

<table>
<thead>
<tr>
<th>Question items</th>
<th>Pervasiveness</th>
<th>Arbitrariness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service delivered as agreed</td>
<td>-0.140</td>
<td>0.716</td>
</tr>
<tr>
<td>Know in advance about how much it is</td>
<td>0.208</td>
<td>0.811</td>
</tr>
<tr>
<td>Another official require additional payment</td>
<td>0.248</td>
<td>0.670</td>
</tr>
<tr>
<td>How often to bribe for getting license</td>
<td>0.790</td>
<td>0.241</td>
</tr>
<tr>
<td>How often to bribe for dealing with taxes</td>
<td>0.845</td>
<td>0.093</td>
</tr>
<tr>
<td>How often to bribe for dealing with courts</td>
<td>0.727</td>
<td>-0.072</td>
</tr>
<tr>
<td>How often to bribe for dealing with customs and imports</td>
<td>0.832</td>
<td>0.174</td>
</tr>
</tbody>
</table>

Eigenvalue 2.970  1.435
Percentage of variance (accumulative) 42.42  62.92

Notes: Extraction method: principal component analysis.
Rotation method: varimax with Kaiser normalisation.