



Contents lists available at ScienceDirect

International Business Review

journal homepage: www.elsevier.com/locate/ibusrev



National economic disparity and cross-border acquisition resolution

Mi-Hee Lim, Ji-Hwan Lee*

KAIST College of Business, Korea Advanced Institute of Science and Technology, 85 Hoegi-ro, Dongdaemun-gu, Seoul 130-722, South Korea

ARTICLE INFO

Article history:

Received 23 December 2015
Received in revised form 9 September 2016
Accepted 28 September 2016
Available online xxx

Keywords:

Cross-border acquisition
Completion
Abandonment
Acquisition duration
National economic disparity
Decision making

ABSTRACT

This paper explores the effects of national economic disparity on the completion or abandonment of cross-border acquisitions by combining behavioral perspectives of risky decision making and theories of organizational learning. Using a sample of 2445 cross-border acquisitions announced between 1985 and 2008, we show that an acquisition is less likely to be completed when the acquirer is from a more developed country *vis-a-vis* the target than when the acquirer is from a less developed country. Furthermore, the higher the economic development level of the acquirer's country relative to that of the target, the less likely the deal is to be completed. We also find that the time elapsed between the acquisition announcement and completion dates is shorter as the economic development level of the acquirer's country relative to that of the target is higher.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

As the volume of mergers and acquisitions (M&As) has grown sharply over the last several decades, studies of these transactions have been actively conducted in the fields of management and finance (Haleblian, Devers, McNamara, Carpenter, & Davison, 2009; Porzio, 2015). Moreover, the acceleration of globalization after the first decade of the 21st century and the widespread use of cross-border acquisition as the most significant foreign direct investment (FDI) vehicle have spurred scholars to extend their attention to cross-border acquisitions (e.g., Di Giovanni, 2005; Dikova, Rao Sahib, & van Witteloostuijn, 2010; Very & Schweiger, 2001; Zander & Zander, 2010). Such attempts have formed an emerging and promising body of research in international business, which delves into the consequences of country-level differences.

However, most studies on acquisitions, regardless of the geographic context, have focused on completed deals, as scholars are primarily interested in the post-acquisition outcomes of the firms involved (Datta, Pinches, & Narayanan, 1992; King, Dalton, Daily, & Covin, 2004). However, the share of acquisitions abandoned after a public announcement amounts to as high as 25% (Holl & Kyriaziz, 1996), as the acquirer maintains rights to renegotiate and withdraw the offer after an announcement (Puranam, Powell, & Singh, 2006). Nonetheless, research on

abandoned transactions is scarce. Recently, scholars have begun to investigate the factors behind persistence (i.e., completion) or withdrawal (i.e., abandonment) of acquisition deals by approaching them from various theoretical angles and levels of analyses. For instance, the national environment, such as institutional, political, or cultural conditions (e.g., Dikova et al., 2010; Popli, Akbar, Kumar, & Gaur, 2016; Zhang & He, 2014; Zhang, Zhou, & Ebbbers, 2011), and firm characteristics, such as prior experience or strategic compatibility (e.g., Dikova et al., 2010; Meyer & Altenborg, 2008; Muehlfeld, Rao Sahib, & Van Witteloostuijn, 2012), are revealed as significant predictors of acquisition completion. Given the continuing spread of acquisitions across the world, especially in cross-border contexts (Bolger, 2014), we believe there is much left to explore in this phenomenon.

Several studies examine the impacts of national factors on organizational behaviors and performance in a cross-border acquisition context; for example, economic characteristics (Berry, Guillén, & Zhou, 2010; Di Giovanni, 2005; Tsang & Yip, 2007), political conditions (Zhang et al., 2011), institutions (Dikova et al., 2010; Pablo, 2009; Rossi & Volpin, 2004), and culture (Chakrabarti, Gupta-Mukherjee, & Jayaraman, 2009; Kogut & Singh, 1988; Morosini, Shane, & Singh, 1998; Popli et al., 2016) are suggested as important factors. Because one of the provocative inquiries in this stream of literature is the role of country differences in acquisitions, this paper seeks to explore the effects of national economic discrepancy on two consequences of cross-border acquisitions (Dikova et al., 2010): deal resolution (completion versus abandonment) and deal duration (time elapsed between announcement and completion).

* Corresponding author.

E-mail addresses: mich@business.kaist.ac.kr (M.-H. Lim),
jihwanlee@business.kaist.ac.kr (J.-H. Lee).

We confine our research to cases completed or abandoned *after* a public announcement (i.e., the acquisitions initiated and resolved entirely in private and those abandoned before a public announcement are not included in this research). Such a setting has several merits that allow us to apply and elaborate theoretical frames more clearly. First, unlike many acquisitions that feature multiple potential acquirers or candidates before a public announcement, transactions that are publically announced typically involve only one acquirer. Second, while it is difficult to determine which side (acquirer or target) actually has greater bargaining power in a deal before a public announcement, decisions regarding completion or abandonment after a public announcement are more likely to be determined by the acquirer. Third, as more information tends to become available after a public announcement, the parties involved—especially the acquirer—can more accurately evaluate the attractiveness and hazards of a deal, thus reducing the likelihood of misjudgment.

This paper employs behavioral perspectives of risky decision making, including prospect theory, because acquisition completion or abandonment is an outcome of risky decisions made by individuals (in this context, managers) (March & Shapira, 1987; Pablo, 1994). While the traditional decision criteria include expected return, on the positive side, and perceived risk, on the negative side, behavioral perspectives of risky decisions also address decision makers' manner and capabilities in risky situations that elaborate the behavioral nature of decision making. This paper is also based on theoretical developments in organizational learning (Bandura, 1977; March, 1991) showing that the accuracy and efficiency of acquisition deals are largely dependent on the capabilities of the acquirer. While, in reality, only a few firms might have prior experience in cross-border acquisitions, we account for the possibility of vicarious learning through peer firms in a given national and institutional environment.

Our empirical results from 2445 cross-border acquisitions announced during the 1985–2008 period reveal that the possibility and duration of acquisition completion can be explained by the national economic status of the firms involved. We find that a cross-border acquisition is less likely to be completed when the acquirer is from a more developed country relative to the target than when the acquirer is from a less developed country. Such a tendency becomes stronger as the national economic difference between the two parties grows. However, conditional on completing the acquisition, as the economic development level of the acquirer's country increases relative to the target's country, less time is required to complete the deal after a public announcement.

In the next section, we provide the theoretical background of our study and develop hypotheses regarding the probability of cross-border acquisition completion and the duration of the intermediary takeover process. Next, we describe our sample, measures, and analytical models. Then, we present and interpret the results of the empirical tests. Finally, we identify the implications of our findings and offer avenues for future research.

2. Theoretical background

2.1. Pre-acquisition process and abandonment

There are numerous decision steps in the acquisition process (Pablo, Sitkin, & Jemison, 1996; Very & Schweiger, 2001). Researchers often decompose the takeover process into the private and public phases, i.e., the phases before and after a public announcement (Boone & Mulherin, 2007; Dikova et al., 2010; Moeller, Schlingemann, & Stulz, 2004; Schwert, 1996). The private takeover process generally begins when a selling firm privately initiates a deal by hiring advisory firms and considering potential

bidders and ends when a preferred bidder is chosen after concluding certain activities (e.g., contacting potential bidders, disclosing non-public information under a confidential agreement, negotiating) (Boone & Mulherin, 2007; Dikova et al., 2010). For its part, the public takeover process generally begins with a public announcement and ends in resolution (completion or abandonment) after concluding certain activities (e.g., disclosing detailed and up-to-date information, conducting due diligence, negotiating) (Boone & Mulherin, 2007; Dikova et al., 2010). Whereas the target firm often negotiates with multiple potential acquiring firms during the private takeover phase (i.e., 1:M), it usually negotiates with only one potential acquiring firm during the public takeover phase (i.e., 1:1). Moreover, the target firm can more easily handle and affect deals during the private takeover phase than during the public takeover phase because it can choose the depth of the auction (e.g., the number of bidders, the information provided, the preferred bidder) (Boone & Mulherin, 2007; Hansen, 2001). Therefore, the bargaining power of the acquiring firm during the public takeover phase would naturally be higher than during the private takeover phase.

When an acquisition is abandoned after a public announcement, both the target and the acquirer are negatively affected (Asquith, 1983). Although abandonment at any phase in the process entails costs involving money, time and effort, abandonment during the public takeover process often generates much larger costs, including serious business and/or reputational costs over the long term (Luo, 2005; Officer, 2003). However, damage to the target firm is more severe than that to the acquiring firm because the former's management must continue to operate the firm, which it had intended to sell. For example, after the intention to relinquish firm ownership is revealed and then abandoned, the target is more likely to face threats to business continuity, such as reputational damage, abrupt customer churn, and employee agitation. Indeed, Asquith (1983) demonstrates that unsuccessful deals have a greater negative impact on the target than on the acquirer. One of our interviewees in the M&A advisory unit of a large investment bank compared such difficulties to those "a person rumored to consider leaving a firm faces when he has to give up the plan and stays". Moreover, target firms usually gain positive outcomes through acquisition, while acquiring firms often do not (Datta et al., 1992; King et al., 2004). Compared to acquiring firms, these differences will lead target firms to recognize higher opportunity costs and greater potential damage from deal abandonment.

Considering the greater bargaining power and lower potential damage of the acquiring firm, we assume that acquisition abandonment after a public announcement is more likely to be decided by the acquiring firm than by the target firm. Consequently, the current study endeavors to identify the determinants of the cross-border acquisition decision process mainly from the acquirer perspective. Indeed, the institutional system was created to prevent abandonment by acquiring firms to some extent and can serve as evidence of this assumption. For example, it is common in several countries for an acquiring firm to pay a portion of the total transaction amount as a down payment when selected as a preferred bidder before initiation of the public takeover phase.

2.2. Behavioral perspectives of risky decisions

As the ultimate decision regarding whether to complete a deal in our context is made by top managers, this study approaches the phenomenon from the perspectives adopted by managers with respect to risky decisions and risk taking (March & Shapira, 1987). A risky decision is defined as a decision involving "high uncertainty or extreme outcomes" (Sitkin & Weingart, 1995). Due to country—in addition to firm—differences, initiating and completing a cross-

border acquisition entails high levels of uncertainty and complexity. It is thus more difficult to predict the outcomes of a cross-border acquisition transaction, although the consequences are expected to be substantial (Chen, Crossland, & Huang, 2016; Dikova et al., 2010; Shimizu, Hitt, Vaidyanath, & Pisano, 2004). Therefore, a cross-border acquisition can be regarded as a typical risky decision.

In risky decision contexts, a decision maker will make a very careful choice based on his or her assessment of expected return and perceived risk. As insightfully noted by March and Shapira (1987), executive managers under pressure from risky decisions tend to recognize expected return as a positive outcome and perceived risk as a negative outcome. Hence, the expected return positively influences the likelihood of selecting a risky alternative, whereas perceived risk negatively influences it. When jointly considering the effects of expected return and perceived risk, it is relatively easy to make a decision in a situation characterized by high expected return with low perceived risk (select the risky alternative) or by low expected return with high perceived risk (do not select the risky alternative).

However, a decision maker faces serious difficulties when there is a trade-off between expected return and perceived risk (i.e., low expected return with low perceived risk or high expected return with high perceived risk). Particularly in the context of cross-border acquisitions, investment opportunities with high expected return and low perceived risk, which can be easily arbitrated by firms, are now rarer than ever. For the problematic situations containing a trade-off between expected return and perceived risk, we can employ another theoretical dimension influencing a decision maker's assessment of the situation, i.e., attitude toward risk.

Prospect theory (Kahneman & Tversky, 1979) proposes that as individuals tend to prefer certain outcomes to uncertain outcomes, the predictability of the return can influence the decision maker's judgment, which is called the "certainty effect". Therefore, when the expected return is relatively certain, decision makers tend to exhibit risk aversion not to lose the probable return and will ultimately avoid the risky alternative (Kahneman & Tversky, 1979; Sitkin & Weingart, 1995). Conversely, when the expected return is relatively uncertain, decision makers tend to exhibit risk-seeking behaviors to obtain the potential gains and will ultimately select the risky alternative (Kahneman & Tversky, 1979; Sitkin & Weingart, 1995). Therefore, the predictability of expected return influences the decision maker's attitude toward risk and, eventually, the final completion or abandonment decision. In this regard, this study considers the predictability of the expected return as an additional and very useful characteristic in a risky decision scenario.

In sum, when a decision maker considers either completing or abandoning a cross-border acquisition, he or she is affected by three factors: expected return, perceived risk, and attitude toward risk, as determined by return predictability. A decision maker is more likely to decide to complete the acquisition when the expected return is high and the perceived risk is low and more likely to abandon the acquisition when the expected return is low and the perceived risk is high. In addition, when it is difficult to determine whether the expected return exceeds the perceived risk, the level of certainty of obtaining the expected return affects the decision maker's attitude and, eventually, the completion decision.

2.3. Acquisition capabilities and vicarious learning

The above managerial perspectives of risky decisions can be enriched by theories of organization learning. Above all, given the well-known trade-off between exploitation and exploration (March, 1991), the type of learning opportunity envisaged through an acquisition transaction can influence the decision maker's

attitude toward risk. The greater uncertainty that is often inherent in the process of exploration reduces the predictability of the expected return and leads to risk seeking on the part of the decision maker, which increases the probability of completion. The opposite pattern would be observed in the case of exploitation.

Organizational learning can also serve as a useful theoretical perspective on the efficiency of deal making, which is manifested in the time elapsed between the announcement and completion of a deal. Studies of acquisitions have long found that firms can learn directly from their own experiences and indirectly from others' experiences (Amburgey & Miner, 1992; Baum, Li, & Usher, 2000; DeLong & DeYoung, 2007; Halebian, Kim, & Rajagopalan, 2006; Hayward, 2002; Ingram & Baum, 1997; Muehlfeld et al., 2012). In the context of cross-border acquisitions, indirect learning is often as important as direct learning because these deals are intermittent, rather than regular or frequent, occurrences (Baum et al., 2000; DeLong & DeYoung, 2007; Hayward, 2002). As suggested by vicarious learning theory (Bandura, 1977), organizations can efficiently enhance their knowledge and capabilities by observing and replicating (with some adjustments) a variety of practices and activities of other organizations without direct cost or risk (Barkema & Schijven, 2008; Miner & Haunschild, 1995). An acquirer with greater competence than the target can skillfully navigate the process of deal negotiation and resolution by solving and avoiding problems even in situations involving high risk (Dikova et al., 2010; Lubatkin, 1983). Therefore, opportunities for indirect experience and vicarious learning would contribute to the firm's ability to manage the risk inherent in acquisition transactions and, eventually, to the time taken to complete a deal.

3. Hypotheses

3.1. National economic disparity

A cross-border acquisition is defined as an acquisition "involving an acquiring firm and a target firm whose headquarters are located in different home countries" (Shimizu et al., 2004, p. 309). This definition implies that the environments of two different countries may affect the acquisition process. Hence, studies in the field of FDI or M&As have been conducted to identify the environmental differences between two countries that affect cross-border acquisitions. For example, economic characteristics such as economic and financial market development status (Berry et al., 2010; Di Giovanni, 2005; Tsang & Yip, 2007), political conditions such as government stability, prevalence of corruption and bureaucratic quality (Berry et al., 2010; Zhang et al., 2011), institutions such as laws, regulations, and accounting standards (Berry et al., 2010; Dikova et al., 2010; Pablo, 2009; Rossi & Volpin, 2004), and culture (Berry et al., 2010; Chakrabarti et al., 2009; Kogut & Singh, 1988; Morosini et al., 1998; Popli et al., 2016) have been suggested as influence factors. While a majority of studies in this stream have focused on the preference for or performance of cross-border acquisitions, scholars have also begun to explore the completion decision (Dikova et al., 2010; Popli et al., 2016; Zhang et al., 2011).

Among the various dimensions that capture national or institutional characteristics, this study focuses on the economic development level of the home countries of the acquiring and target firms. It is customary to categorize cross-border investments by the direction of capital flow between countries with different levels of economic development (Prasad, Rajan, & Subramanian, 2006). This economic status may not be a comprehensive measure of national or institutional differences, but it is one of the most representative indicators of the collective outcomes of the political, legal, and social systems typical in a country (World Bank, 2014). In the context of cross-border acquisitions, for

example, when a firm located in the US (with a GDP per capita¹ of US\$ 54,629) attempts to take over a firm in Indonesia (with a GDP per capita of \$3,491), the potential acquirer experiences quite a large gap, whereas an acquirer from China (with a GDP per capita of \$7,590) experiences a much smaller gap when it attempts to acquire the same firm.

3.2. National economic disparity and acquisition completion

While the gap between countries is often regarded as a threat to international transactions or collaborations (Kostova & Zaheer, 1999), this paper devotes greater attention to the complementarity between firms from countries of different economic levels and the predictability of the acquisition outcome, which can have a more profound impact on managers' behavior in a risky decision context. As the economic distance between two countries increases, the differences in resources or capabilities between the acquirer and the target become more substantial, and thus, the acquirer can obtain greater opportunities for resource exploration or exploitation through the acquisition (Gaur & Lu, 2007; Tsang & Yip, 2007). Therefore, a greater economic difference, other things being equal, may lead to a higher level of expected return, which in turn leads to acquisition completion.

However, if the economic disparity between the two countries is large, the acquirer also perceives high risk, which in turn leads to abandonment of the deal. Acquisitions are typically paid off through a long-term integration process rather than immediately upon the closing of the deal (Larsson & Finkelstein, 1999; Pablo, 1994). Thus, the acquiring firm perceives a high level of risk when it recognizes a large discrepancy with the target firm because of the additional cost of adjusting to an unfamiliar environment (Gaur & Lu, 2007), low familiarity with and trust in the opposite party (Dikova et al., 2010), and/or challenges in the integration process (Kogut & Singh, 1988). Consequently, acquirers consider the problems associated with such acquisitions uncontrollable and tend to withdraw from these deal (Jemison & Sitkin, 1986). As national economic development status is related to environmental factors such as culture (Hofstede, 1983; Tang & Koveos, 2008; Vahlne & Nordström, 1992), when the economic distance between two countries increases, the acquirer may experience large differences with respect to takeover or integration, which leads it to perceive high risk during the takeover process and ultimately to consider abandoning the deal.

There can be contrary predictions for cases with a large economic discrepancy between the acquirer and the target's home countries depending on the focus between expected return and perceived risk. For example, focusing on the level of expected return, Tsang and Yip (2007) argue that economic distance increases the potential benefits of acquisitions, leading us to predict acquisition completion. By contrast, focusing on the level of perceived risk, Dikova et al. (2010) argue that institutional disparity increases complexity or uncertainty and, thus, forces acquisitions to be abandoned. In such situations, we argue that it is necessary to have a balanced and comprehensive perspective by incorporating the role of the decision maker's attitude toward risk, rather than focusing on either positive or negative aspects, to understand the strategic choice.

With respect to the attitude toward risk, we predict that although the economic distance between two countries increases the level of perceived risk, decision makers at the acquirer respond differently depending on their attitude toward risk. Specifically, when the acquirer is in a less developed country than the target (briefly, $A < T$), the acquirer has the opportunity to obtain

significant assets of higher quality to improve its competitiveness and survival through the acquisition because the economic development level is related to the technological level, which relates to exploration (Tsang & Yip, 2007). Exploration involves a high level of uncertainty due to low probabilities of success, lengthy time needed for explorative outcomes, and farness from the locus of adaption and action (March, 1991) and thus creates difficulties in prediction. For example, although the acquiring firm assumes that it can achieve substantial synergy by taking over strategic resources (e.g., technology, management, marketing expertise) via acquisition, it might not be confident that the target actually possesses and will provide the resources or that the ultimate effect will be as large as expected, especially in the case of intellectual resources. This low predictability of the expected return leads the acquirer to exhibit a risk-seeking tendency toward the upside potential (March & Shapira, 1987) and is thus more likely to select the risky alternative (i.e., deal completion).

In contrast, when the acquirer is from a more developed country than the target ($A > T$), the acquiring firm possesses more advantages and can exploit these advantages effectively in the target firm's less developed country, which relates to exploitation (Tsang & Yip, 2007). Exploitation is more certain than exploration (March, 1991), and thus, the firm can more accurately predict the expected return. This accuracy encourages risk aversion and ultimately leads to abandonment of the deal.

For example, it is very likely that the managers of Lenovo, a Chinese company, expected a high level of return from the acquisition of IBM's personal computer (PC) manufacturing technology and customer base in 2005. However, it simultaneously perceived a high level of risk due to the dissimilarities of the two organizations to be combined. Meanwhile, the predictability of the expected return from the China-US deal might have been lower than that of a deal with, say, a Malaysian PC manufacturer whose existing customers and resources would be easily exploited by the Chinese firm. This low predictability of the expected return might have led Lenovo's managers to adopt a more aggressive attitude toward the acquisition of IBM's PC division, which cost as much as 1.75 billion US dollars.

To summarize, decision makers respond differently depending on her attitude toward risk when facing a trade-off between high expected return and high perceived risk. When the acquirer is from a more developed country than the target ($A > T$), it exhibits a tendency toward risk aversion because it can more precisely predict the expected return, and thus, the deal is less likely to be completed (i.e., more likely to be abandoned). However, when the acquirer is from a less developed country than the target ($A < T$), it exhibits a tendency toward risk seeking because it can less precisely predict the expected return, and thus, the deal is more likely to be completed. Therefore, we hypothesize that the completion probability for an acquirer from a more developed country than the target ($A > T$) is lower than for an acquirer from a less developed country than the target ($A < T$). Furthermore, this tendency may become stronger as the economic distance between the parties' countries increases, and relative superiority in the economic development level of the acquirer's country over the target's ($A-T$) may be negatively related to the likelihood of completing the transaction. Therefore, we propose the following.

Hypothesis 1-a. The probability of cross-border acquisition completion after a public announcement is lower when the acquirer is from a more developed country relative to the target ($A > T$) than when the acquirer is from a less developed country relative to the target ($A < T$).

Hypothesis 1-b. The relative economic status of the acquirer's home country *vis-a-vis* the target's ($A-T$) will be negatively

¹ GDP per capita (current US\$) in 2014 from the World Bank.

related to the ultimate completion of a cross-border acquisition after a public announcement

3.3. National economic disparity and acquisition duration

The national economic disparity between the parties may also affect the duration of deal making, which is another critical decision outcome. The time elapsed between the announcement and resolution (i.e., the duration of a public takeover procedure) is important because it reflects the difficulty of the takeover process, and a longer time to deal completion could generate additional expenses (Dikova et al., 2010).

We predict that although an acquirer intends to complete an acquisition, the time taken to complete the deal is contingent on its ability. As completion means that both parties (the seller and the buyer) perceive most critical issues to be resolved (Dikova et al., 2010), the ability to solve problems and to guard against possible issues affects the time to reach completion. This ability can be determined by opportunities for indirect experience and vicarious learning.

As a majority of cross-border acquisitions to date have been conducted by firms from advanced economies (Shimizu et al., 2004; United Nations, 2000, 2008), an acquirer from a developed country may have greater opportunities to observe other cases and then improve its knowledge and capabilities in the domain. Specifically, when the acquirer is from a more developed country than the target ($A > T$), the acquirer can skillfully manage the transaction by avoiding and solving problems during the due diligence or negotiation stages. It is also able to lead the transaction in its favor. For instance, an acquirer with greater competence may choose the right candidate, possess ideas for solving problems during and after the takeover, or develop effective communication strategies. Consequently, less time is required to complete a deal.

In contrast, when the acquirer is from a less developed country than the target ($A < T$), the acquirer may possess relatively weaker ability in the cross-border acquisition domain than the target. Consequently, such an acquirer would experience considerable difficulty managing and advancing the acquisition. Moreover, a target with superior ability in this domain could cause additional issues in its effort to strike a better bargain. Hence, more time is required for the acquirer to complete the transaction. For instance, the managers of Lenovo, a Chinese company, took more than four months after public declaration of their intention to acquire IBM's PC base, a division of the US company, to complete negotiations in 2005, which was longer than it took for other similar transactions (e.g., the takeover of another IBM division by a Canadian company).

To summarize, acquirers will require different amounts of time to complete acquisitions depending on their ability to manage deals, which is mainly established by their opportunities to obtain indirect experience. When the acquirer is from a more developed country than the target ($A > T$), it may have superior capabilities and take less time to complete the transaction. However, when the acquirer is from a less developed country than the target ($A < T$), it may have inferior capabilities and require a longer time to reach completion. Thus, we hypothesize that the duration of deal making for an acquirer from a more developed country than the target ($A > T$) is shorter than for an acquirer from a less developed country than the target ($A < T$). Furthermore, such a tendency may become stronger as the economic distance between the parties' countries widens. Hence, we predict that superiority in the economic development level of the acquirer's country relative to the target's ($A-T$) may be negatively related to the duration of the transaction. Therefore, we propose the following.

Hypothesis 2-a. The time required to complete a cross-border acquisition after a public announcement is shorter when the

acquirer is from a more developed country relative to the target ($A > T$) than when the acquirer is from a less developed country relative to the target ($A < T$).

Hypothesis 2-b. The relative economic status of the acquirer's home country vis-à-vis the target's ($A-T$) will be negatively related to the time required to complete a cross-border acquisition after a public announcement

4. Method

4.1. Data and sample

To test our hypotheses, 16,962 cross-border acquisitions (completed: 13,864, abandoned: 3098) conducted from 1985 to 2008 with transaction values of over \$1 million were selected from the Thomson SDC Platinum database. Because this paper seeks to identify influencing factors based on public announcements, acquisitions with significant omitted information are excluded. We also exclude duplicate observations of a single deal (e.g., a takeover involving a series of partial stock purchases, a takeover completed after former abandonment). The final sample used to test the hypotheses on acquisition completion versus abandonment consists of 2,445 cross-border acquisition deals made by 1,748 firms between 1985 and 2008. Furthermore, we use 1,984 completed acquisitions to verify the hypotheses related to acquisition duration. As such samples represent small portions of the population, we conduct comparative analyses to determine whether the sample is representative of the population. The results show that the completion trends in the sample are nearly identical to those in the population in terms of overall and yearly completion rates. We also find no evidence of differences in average deal size.

Our sample includes not only developed countries (e.g., US, UK, France) but also developing or underdeveloped countries (e.g., Malaysia, China, South Africa, India) on the buyer side. As shown in Table 1, the proportion of cases in which the acquirers' countries are less developed than the targets' reaches 47.7%. This diversity reflects recent trends in cross-border acquisition whereby companies from developing or underdeveloped countries have begun to engage in acquisitions as the acquiring firms, while they had previously been targets.²

4.2. Measurement

Our study considers two dependent variables: acquisition completion and acquisition duration. The first, *acquisition completion*, is measured as a dummy variable. We categorize acquisitions announced to the public as completed (coded '1') and withdrawn or pending (coded '0'). This categorization has been used in previous studies on the likelihood of completion (Dikova et al., 2010; Muehlfeld et al., 2012; Rossi & Volpin, 2004). The second dependent variable, *acquisition duration*, is calculated as the difference between the announcement and completion dates, consistent with Dikova et al.'s (2010) approach. We collect information on the status of an acquisition and the announcement and completion dates from the SDC database.

Our hypotheses relate to national economic status as independent variables. We use data on GDP per capita, which has been widely used to capture the economic status of a country (Tsang & Yip, 2007). We collect the GDP per capita information from the

² <http://www.managementstudyguide.com/cross-border-mergers-and-acquisitions.htm>.

Table 1
Distribution of nationality of acquirers and targets in the sample.

Acquirers						Targets					
Nation	Annou-nced	Comp-leted	Nation	Annou-nced	Comp-leted	Nation	Annou-nced	Comp-leted	Nation	Annou-nced	Comp-leted
United States	590	484	Portugal	10	9	United States	578	502	Israel	16	12
United Kingdom	375	314	Bahamas	9	8	United Kingdom	303	255	Greece	15	11
France	215	187	South Korea	9	8	Australia	174	150	Hungary	15	10
Germany	155	128	Brazil	8	5	Canada	174	139	Austria	14	13
Canada	132	105	Argentina	8	7	France	163	143	Taiwan	14	11
Netherlands	129	117	Iceland	8	8	Germany	122	105	Turkey	14	10
Hong Kong	112	90	Poland	7	6	India	115	84	Ireland-Rep	12	10
Japan	111	92	Indonesia	6	5	Japan	84	77	Mexico	11	11
Singapore	110	97	Philippines	5	5	Singapore	79	61	Russian Fed	11	9
Switzerland	98	81	Saudi Arabia	5	5	Hong Kong	76	46	Peru	9	7
Sweden	90	78	Colombia	3	2	Spain	73	65	Colombia	8	4
Spain	86	74	Kuwait	3	2	Sweden	70	64	Egypt	6	5
Italy	71	63	Chile	3	3	Netherlands	52	45	Luxembourg	6	5
Australia	69	54	Slovak Rep	3	3	New Zealand	50	40	Jordan	4	3
Belgium	45	39	Venezuela	3	3	Norway	47	36	Venezuela	3	3
Ireland-Rep	33	27	Turkey	2	0	Belgium	44	41	Bahamas	2	2
Finland	33	30	Greece	2	1	Switzerland	44	32	Pakistan	2	2
Malaysia	30	24	Oman	2	1	China	41	21	Ghana	1	1
Luxembourg	26	18	Bahrain	2	2	Brazil	36	33	Iceland	1	1
New Zealand	26	25	Morocco	1	0	Italy	36	28	Lithuania	1	1
Denmark	25	24	Vietnam	1	0	Indonesia	35	33	Panama	1	1
China	22	12	Belize	1	1	South Africa	35	30	Papua N Guinea	1	1
Mauritius	21	13	Brunei	1	1	Finland	31	28	Saudi Arabia	1	1
Austria	21	17	Czech Republic	1	1	Malaysia	31	23	Slovenia	1	1
South Africa	21	19	Egypt	1	1	Denmark	29	24	Total	2872	2399
Norway	21	21	Liberia	1	1	South Korea	29	23			
United Arab Emirates	17	14	Lithuania	1	1	Chile	27	25			
Mexico	16	13	Panama	1	1	Thailand	25	20			
Israel	15	13	Qatar	1	1	Argentina	22	21			
Russian Fed	13	10	Thailand	1	1	Philippines	22	20			
India	12	8	Ukraine	1	1	Portugal	20	18			
Taiwan	11	7	Uzbekistan	1	1	Poland	19	16			
Cyprus	10	7	Total	2872	2399	Czech Republic	17	16			

Note: Observations before eliminating duplicates.

World Bank database.³ We first employ a dummy variable, *acquirers from more developed countries*, indicating whether the economic development level of the acquirer's home country is higher than that of the target. We then consider a continuous variable, the *economic discrepancy between two countries*, using log-transformed GDP per capita to prevent analytical errors arising from large gaps between countries (Forssbäck & Oxelheim, 2008). Thus, we collect log-transformed GDP per capita of the acquirer and target's home countries and then calculate the logarithmic difference between the two. The logarithmic difference provides an excellent approximation of the percentage difference between two countries' GDP per capita (Tsang & Yip, 2007).

We control for variables that are considered influential in determining acquisition completion or abandonment. First, with respect to national-level variables, we control for the *difference in legislative strength* and the *difference in contract viability* between the acquirer and target countries because institutional distance has been demonstrated to influence the behavior of parties and interventions by governments (Berry et al., 2010; Dikova et al., 2010; Rossi & Volpin, 2004). To measure these variables, we use the PRS Group's⁴ International Country Risk Guide employed by Dikova et al. (2010). We include *same continent*, a binary variable indicating whether the parties are located on the same continent,

to control for the geographic distance between two countries because geographic distance can affect the extent of information asymmetry (Chakrabarti & Mitchell, 2016) and, to some extent, imply informal institutional differences. In addition, we searched the internet for as many cases as possible of acquisitions that were reportedly blocked (and thus abandoned) due to regulatory enforcement during our observation period. We identified a dozen such cases, but they were excluded from the final sample due to insufficient information about the details.

Second, we control for *industry relatedness* between acquiring and target firms to address potential industry effects. Prior studies suggest that, as in cases of diversification (Berger & Ofek, 1995; Capron, 1999; Rumelt, 1982), industry-related acquisitions produce more beneficial outcomes than do unrelated ones due to greater possibilities for resource sharing and lower possibilities of information asymmetry (Healy, Palepu, & Ruback, 1992; Lim & Lee, 2016; Singh & Montgomery, 1987). We thus categorize the acquisitions made by parties from an identical industry as related acquisitions and the others as unrelated acquisitions.

Third, we control for acquiring firms' characteristics. As financial variables, including pre-bid performance, have been proven to affect the investment decision (Forssbäck & Oxelheim, 2008; Palepu, 1986; Wong & O'sullivan, 2001), we consider financial status variables. Specifically, we control for *return on equity*, a measure of profitability, and *sales growth rate*, a measure of firm growth, to restrict the potential effects of an acquirer's desire and need for a successful takeover (Kim, Halebian, &

³ <http://data.worldbank.org>.

⁴ <https://www.prsgroup.com>.

Table 2
Descriptive statistics and correlations.

Variables	Mean	s.d.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Acquisition completion	0.98	0.00	1.00									
(2) Acquisition duration	87.77	3.04	-0.07*	1.00								
(3) Acquirer from a more developed country	0.52	0.01	-0.06*	-0.03	1.00							
(4) Superior economic level (A-T)	0.04	0.05	-0.04*	-0.03	0.84*	1.00						
(5) Legislative strength difference	0.36	0.01	-0.02	0.00	-0.03	-0.05*	1.00					
(6) Contract viability difference	0.59	0.01	-0.03	0.07*	0.02	0.04*	0.14*	1.00				
(7) Same continent	0.43	0.01	-0.00	-0.03	0.01	0.00	0.11*	-0.08*	1.00			
(8) Industry relatedness	0.54	0.01	0.04*	0.08*	0.01	0.03	-0.04*	0.04	0.01	1.00		
(9) Return on equity	14.85	0.29	0.02	-0.01	0.06*	0.05*	-0.03	0.04	-0.01	0.04*	1.00	
(10) Sales growth rate	45.08	1.59	-0.01	-0.03	0.02	0.02	0.01	0.05*	-0.06*	-0.04*	0.07*	1.00
(11) Leverage ratio	0.29	0.01	0.02	-0.03	-0.07*	-0.06*	-0.00	-0.05*	-0.01	-0.06*	-0.08*	0.00
(12) Firm size	5.07	0.04	0.05*	0.09*	0.02	0.03	0.04*	0.02	0.03	0.09*	-0.11*	-0.08*
(13) Public status	0.33	0.01	0.06*	0.04	0.05*	0.06*	-0.07*	0.01	0.00	0.24*	0.02	-0.02
(14) Prior acquisition experience	0.28	0.01	-0.04*	0.02	0.02	0.01	0.03	0.04*	-0.02	-0.05*	0.02	-0.05*
(15) Use of advisors	0.57	0.01	0.11*	0.18*	-0.02	-0.01	-0.03	0.01	-0.00	0.22*	0.05*	-0.08*
(16) Defense strategy	0.04	0.00	-0.04*	0.03	-0.12*	-0.11*	-0.08*	-0.08*	-0.07*	0.07*	-0.03	-0.05*
(17) Percentage sought	50.43	0.88	-0.04*	0.16*	-0.08*	-0.07*	-0.15*	-0.09*	-0.01	0.17*	0.05*	-0.07*
(18) Bid premium	20.98	1.31	0.01	0.03	-0.05*	-0.06*	-0.01	0.01	-0.05*	0.03	-0.02	-0.03
(19) Termination fees	0.03	0.00	0.04*	0.09*	-0.12*	-0.11*	-0.07*	-0.05*	-0.07*	0.07*	0.00	-0.02
(20) Stock consideration	0.08	0.01	-0.00	0.12*	0.04*	0.03	-0.07*	-0.03	0.03	0.16*	0.03	0.05*
(11) Leverage ratio	-	-	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(12) Firm size	-	-	1.00	1.00								
(13) Public status acquirer	-	-	-0.04	0.07*	1.00							
(14) Prior acquisition experience	-	-	0.00	0.16*	0.05*	1.00						
(15) Use of advisors	-	-	-0.12*	0.19*	0.19*	0.02	1.00					
(16) Defense strategy	-	-	-0.05*	0.02	-0.01	-0.01	0.13*	1.00				
(17) Percentage sought	-	-	-0.13*	-0.17*	0.16*	-0.09*	0.47*	0.19*	1.00			
(18) Bid premium	-	-	-0.04*	-0.06*	0.05*	-0.02	0.12*	0.08*	0.21*	1.00		
(19) Termination fee	-	-	-0.02	0.05*	0.05*	-0.03	0.13*	0.17*	0.21*	0.07*	1.00	
(20) Stock consideration	-	-	-0.07*	0.10*	0.22*	-0.01	0.16*	0.02	0.23*	0.03	0.21*	1.00

Note: N = 2030; *p < 0.05

Finkelstein, 2011). We also include *firm size*, measured as the log-transformed total assets, and *leverage ratio* because these affect an acquirer's ability to finalize a transaction. In addition, this study includes *prior cross-border acquisition experience*, measured by whether an acquirer had experience in cross-border acquisitions before the focal transaction, to control for direct experience impacts (Chakrabarti & Mitchell, 2016; Collins, Holcomb, Certo, Hitt, & Lester, 2009; Halebian & Finkelstein, 1999). As advisors can provide indirect experience for the acquirer and thus influence both the completion probability and the speed of completion, we include *the use of advisors*⁵, a variable indicating whether an acquirer hired advisors for the deal (Boeh, 2011; Hunter & Jagtiani, 2003). Regarding corporate governance, we control for *public status* using a dummy variable indicating whether the firm is publicly owned because publicly traded firms are likely to face stricter regulations throughout the deal and to encounter more difficulties in completing the transaction (Dikova et al., 2010).

Finally, we control for five key attributes of deal characteristics that can influence the completion decision. We believe that whether a target executed a *defense strategy* against acquisition is important because such resistance could impede takeover processes and decrease the probability of acquisition completion. We include the *percentage sought* since the percentage of ownership in the target sought by the acquiring firm may influence the approval procedure. We control for *bid premium* because a higher acquisition premium can increase the likelihood of completion (Wong & O'sullivan, 2001). Given the possible influence of *termination fees* on the attitudes of the parties in the focal acquisition (Bates & Lemmon, 2003; Officer, 2003), we include a dummy variable indicating that the acquirer would be charged termination fees or not charged such fees. We include

stock consideration indicating whether the deal is financed by issuing stocks or by other methods, such as cash and debt, because payment methods can affect a firm's ability to pay, as well as their behaviors in the takeover processes. In addition to the above controls, *year dummies* are included in every model specification.

4.3. Model

We estimate binary probit regression models with a dummy for completion as the dependent variable to test the hypotheses referring to the likelihood of acquisition completion. Furthermore, we use Tobit regression models with deal duration as the dependent variable to test the hypotheses concerning acquisition duration. We estimate Tobit regressions because the data on deal-related dates are not available for all acquisition cases; if we were to assume that missing data are zero values or to simply exclude those observations from the sample, we would obtain biased and incongruent estimates (Tobin, 1958).

As most firms in our sample were involved in only one or two cross-border acquisitions (56% and 19%, respectively) with an average of 1.4 times over the observation period (24 years), we mainly utilize pooled estimations. The results of a likelihood-ratio test reveal that pooled estimations are better suited to our analysis than panel estimations.

5. Results

Table 2 reports the means, standard deviations, and correlations between variables. There are some significant correlations between several variables, but they should not generate serious multicollinearity issues. The absolute values of the correlations are below 0.7, the typical cutoff. Moreover, the variance inflation factor of each estimation ranges between 1.03 and 1.71, values well below the standard threshold of 10.

⁵ We are grateful for an anonymous reviewer's suggestion to include *the use of advisors* as a control.

Table 3 displays the results of binary probit regressions for acquisition completion. Model 1, which includes only control variables, is the benchmark specification; Models 2–3 are estimated with the independent variables to separately test our hypotheses.

We restrict the discussion of the results of Model 1 to the variables that are consistently significant estimators in most of the models for the sake of brevity. The contract viability difference is negatively related to the acquisition completion, as expected. We also find that the defense strategy and the percentage of the shares sought decrease the likelihood of completion. Termination fees significantly increase the completion probability. The prior relevant experience of an acquirer negatively affects the likelihood of completion, while the use of advisors positively affects it. These different influences show that direct firm experience may enhance conservatism toward deals but that indirect experience from external advisors may facilitate deals and catalyze deal completion.

The results of Model 2 support Hypothesis 1-a. The variable indicating acquirers from a more developed country has a negative and significant effect on the likelihood of completion ($\beta = -0.237$, $p < 0.01$). That is, when the acquirer is from a more developed country than the target, it is less likely to complete the acquisition

Table 3
Regression results on acquisition completion.

Variables	Model 1	Model 2	Model 3
Legislative strength difference	-0.055 (0.082)	-0.080 (0.082)	-0.081 (0.082)
Contract viability difference	-0.094* (0.056)	-0.102* (0.056)	-0.099* (0.056)
Same continent	-0.011 (0.067)	-0.022 (0.067)	-0.026 (0.067)
Industry relatedness	0.061 (0.068)	0.061 (0.069)	0.062 (0.069)
Return on equity	0.003 (0.003)	0.004 (0.003)	0.004 (0.003)
Sales growth rate	1.11e-04 (4.50e-04)	1.06e-04 (4.49e-04)	1.21e-04 (4.49e-04)
Leverage ratio	0.054 (0.078)	0.034 (0.078)	0.042 (0.078)
Firm size	0.011 (0.020)	0.011 (0.020)	0.012 (0.020)
Public status	0.098 (0.102)	0.086 (0.102)	0.086 (0.102)
Prior acquisition experience	-0.170** (0.071)	-0.173** (0.071)	-0.172** (0.071)
Use of advisors	0.572*** (0.079)	0.574*** (0.079)	0.572*** (0.079)
Defense strategy	-0.450*** (0.167)	-0.473*** (0.168)	-0.468*** (0.168)
Percentage sought	-0.006*** (0.001)	-0.006*** (0.001)	-0.006*** (0.001)
Bid premium	3.39e-04 (0.001)	2.54e-04 (0.001)	2.48e-04 (0.001)
Termination fee	0.645*** (0.238)	0.590** (0.241)	0.603** (0.241)
Stock consideration	-0.222* (0.132)	-0.196 (0.132)	-0.204 (0.133)
Acquirer from a more developed country		-0.237*** (0.069)	
Superior economic level (A-T)			-0.042*** (0.015)
Constant	1.147** (0.479)	1.202** (0.479)	1.100** (0.482)
Observations	2445	2445	2445
Log-likelihood	-982.28	-976.24	-978.28
LR (or Wald) Chi-square	171.44***	183.52***	179.44***
Pseudo-R ²	0.0803	0.0859	0.0840

Notes: *p < 0.1; **p < 0.05; ***p < 0.01; 23 year dummies are not shown; numbers in parentheses are standard errors.

after a public announcement (i.e., it is more likely to abandon the acquisition). However, when the acquirer is from a less developed economy than the target, it is more likely to complete the acquisition. In non-linear estimations, such as probit models, the magnitudes of coefficients do not indicate effect sizes straightforwardly. Therefore, we calculate the marginal effects. The results show that when an acquirer is from a more developed country than a target, the acquisition is 5.197% less likely to be completed compared to the reverse case.

In Model 3, we find that relative superiority in the economic level of an acquirer's home country over that of a target has a negative and significant impact on the completion likelihood ($\beta = -0.042$, $p < 0.01$), which supports Hypothesis 1-b. That is, contrary to general expectations, the economic distance between the parties affects the acquisition decision differently depending on whether the acquirer is in the upper or lower position. When the acquirer is from a more developed country than the target ($A > T$), a large discrepancy in economic status decreases the likelihood of acquisition completion (i.e., increases the likelihood of abandonment), whereas when the acquirer is from a less developed country than the target ($A < T$), a large discrepancy increases the likelihood of acquisition completion. A one-unit increase in the economic distance decreases the probability of completion by 0.933%.

Table 4 presents the results of the Tobit regressions for acquisition duration. These model specifications are similar to those of the probit regressions documented above. Model 1, which includes only control variables, reveals that the difference in contract viability, representing formal institutional distance, increases the time required for completion, whereas being located on the same continent, representing informal institutional distance, decreases the time required for acquisition. The results also show that a lower leverage ratio and a larger size of an acquirer significantly increase acquisition duration. The use of advisors is positively related to acquisition duration because it might instigate a cautious approach to the deal. Finally, the percentage of ownership sought and stock payment increase the time required for a firm to complete an acquisition.

The Hypothesis 2-a predicts that the acquisition duration will be shorter when the acquirer is from a more developed country relative to the target than when it is from a less developed country than the target. However, our results do not support this hypothesis. We find a negative but insignificant effect ($\beta = -6.704$) in Model 2.

We also predict that the economic status of an acquirer's home country vis-a-vis that of the target will negatively affect acquisition duration in Hypothesis 2-b. The results in Model 3 support this hypothesis. The difference in economic level has a negative and significant impact on acquisition duration ($\beta = -3.395$, $p < 0.05$). This implies that the effect of economic distance on acquisition duration is contingent upon whether the acquirer is in an upper or lower position. When the acquirer is from a more developed economy than the target ($A > T$), a large discrepancy in economic status decreases the time for the firm to complete. Conversely, when the acquirer is located in a less developed country than the target ($A < T$), a large discrepancy increases the time to complete. Despite these effects proven, the overall level of variance explained is low, conspicuously so in the regression models of acquisition duration.

6. Discussion and conclusion

We explored the effects of the parties' national economic status on the completion decision of a cross-border acquisition, focusing on the intermediate, public takeover period between the public announcement and its final resolution. Building upon the

Table 4
Regression results on acquisition duration.

Variables	Model 1	Model 2	Model 3
Legislative strength difference	15.61 (9.671)	14.96 (9.698)	13.56 (9.722)
Contract viability difference	15.47** (6.433)	15.40** (6.431)	15.52** (6.429)
Same continent	-13.49* (7.535)	-13.72* (7.535)	-14.19* (7.533)
Industry relatedness	11.43 (7.663)	11.48 (7.662)	11.73 (7.661)
Return on equity	-0.137 (0.285)	-0.125 (0.285)	-0.114 (0.285)
Sales growth rate	-0.024 (0.051)	-0.024 (0.051)	-0.022 (0.051)
Leverage ratio	-16.74* (9.292)	-17.29* (9.311)	-17.95* (9.314)
Firm size	9.173*** (2.362)	9.153*** (2.361)	9.190*** (2.36)
Public status	-7.403 (11.01)	-7.736 (11.02)	-8.611 (11.02)
Prior acquisition experience	11.06 (8.269)	10.99 (8.267)	10.76 (8.264)
Use of advisors	46.65*** (9.008)	46.77*** (9.006)	46.59*** (9.003)
Defense strategy	-28.54 (20.52)	-29.61 (20.55)	-30.16 (20.52)
Percentage sought	0.979*** (0.117)	0.970*** (0.118)	0.968*** (0.117)
Bid premium	-0.014 (0.070)	-0.014 (0.071)	-0.017 (0.071)
Termination fee	27.60 (19.85)	25.64 (19.96)	22.57 (19.98)
Stock consideration	47.12*** (14.08)	47.89*** (14.10)	48.17*** (14.08)
Acquirer from a more developed country		-6.704 (7.558)	
Superior economic level (A-T)			-3.395** (1.706)
Constant	-130.2* (68.79)	-128.6* (68.83)	-135.1** (68.85)
Observations	1984	1984	1984
Log-likelihood	-9739.08	-9738.69	-9737.13
LR (or Wald) Chi-square	325.78***	326.56***	329.68***
Pseudo-R ²	0.0165	0.0165	0.0166

Notes: *p < 0.1; **p < 0.05; ***p < 0.01; 23 year dummies are not shown; numbers in parentheses are standard errors.

behavioral perspectives of risky decisions and theories of organizational learning, we proposed a model that predicts the completion likelihood based on the attitude toward risk and completion duration based on the ability to manage complicated deals. Our findings revealed that an acquisition by a firm from a more developed economy is less likely to be completed (i.e., more likely to be abandoned), whereas an acquisition by a firm from a less developed economy is more likely to be completed. Such results are consistent with our theoretical conjecture that greater predictability of expected return from the acquirer's viewpoint may lead decision makers to exhibit risk aversion, and vice versa. These tendencies become stronger as the economic difference increases.

In addition, when an acquirer is from a more developed country, the economic discrepancy decreases the time required to complete an acquisition deal because decision makers tend to possess a greater ability to manage deals due to cumulative vicarious learning. By contrast, when an acquirer is from a less developed country, the economic discrepancy increases the deal duration because decision makers tend to possess a lesser ability to manage deals. Thus, an acquirer from a more developed economy may have a weaker inclination to complete a deal, but for completed deals, less time is required to close the deal. Although an acquirer from a less developed economy may have a stronger intention to

complete a transaction, more time elapses between announcement and completion.

As we observe record high volumes of acquisitions almost every year (Porzio, 2015), this paper aimed to contribute to the acquisition literature along multiple dimensions, particularly to the cross-border acquisition literature. First, our research is based on the notion that the progress and settlement of acquisition transactions can be substantially affected by decision makers' attitudes and abilities in a risky landscape. We believe that such an approach considers the behavioral nature of real-life decision making and advances our understanding of the acquisition process beyond traditional efforts to tease out possibly meaningful associations between variables. By considering not only positive and negative aspects (i.e., expected return and perceived risk), which have been recognized in previous research on risky decisions, but also attitudes toward risk and managerial capabilities, we can better understand decision makers' reasoning and more precisely predict the probability of acquisition.

Second, this study considered the direction of investment among countries with different levels of economic development in addition to the absolute differences between countries that are usually examined in studies (e.g., Dikova et al., 2010; Zhang et al., 2011). Most relevant studies examining the absolute difference or distance between parties—in terms of aspects such as institutions, cultures, and geographic locations—have usually proposed a negative effect of these distances on acquisition completion (e.g., Chakrabarti & Mitchell, 2016; Dikova et al., 2010; Zhang et al., 2011). However, our results showed that the effect of disparity depends on the direction of the investment; it is determined by the relative economic status between the acquirer and target's home countries. For example, a certain degree of economic distance can hinder acquisition completion when the acquirer is from a more developed country than the target, while the same degree of economic distance can facilitate acquisition completion when the acquirer is from a less developed country than the target.

Third, this is one of few studies that explore decisions during the public takeover period in the cross-border context. Despite the criticality and difficulty entailed in eventual abandonment of an acquisition at a close-to-final stage, the operational mechanism of the public takeover process has attracted relatively little attention in the literature compared with post-acquisition performance. The decisions during the pre-acquisition stage, such as completion vs. abandonment after an announcement, are also important strategic agenda items that can be considered by decision makers and significantly influence organizational outcomes. As an extension of studies of acquisition completion in the domestic context (e.g., Bates & Lemmon, 2003; Chakrabarti & Mitchell, 2016; Luo, 2005), this paper sought to determine the decision-making mechanisms that operate in the public pre-acquisition stage and suggested national underlying factors by incorporating the withdrawn deals that have been largely ignored in the previous literature.

Fourth, our sample reflects recent cross-border acquisition trends whereby more developing or underdeveloped nations are buyers. Analyzing such a sample can yield significant implications relevant to trends in the real world. A few scholars have identified distinct features of acquisitions—e.g., higher premiums (Hope, Thomas, & Vyas, 2011) and lower outcomes (Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010)—conducted by firms in developing countries. Dikova et al.'s (2010) evidence of the negative effects of an institutional gap on acquisition completion and duration might be partly due to the characteristics of the sample of transactions between firms from developed economies only. We conjecture that the expected return and perceived risk is limited for acquisitions between developed economy firms (i.e., a trade-off situation); thus, the decision makers' risk attitudes might act as

key decision factors. In particular, it is possible that the negative impact of institutional distance is due to risk-averse attitudes generated by the greater predictability of the expected return. In that regard, our findings do not dismiss the implications of previous studies but add value to our understanding of cross-border acquisitions.

This study also has practical implications. We identified *ex ante*, rather than *ex post*, variables affecting acquisition completion. It is certainly useful for participants in the transaction and those influenced directly or indirectly by the transaction to be able to predict the probability and timing of acquisition completion using *ex ante* variables. First, from a target's perspective, it is necessary to manage the risk of deal abandonment by selecting a more desirable potential acquirer as the preferred bidder before announcing the acquisition and establishing a more effective negotiation strategy. Given the substantial damage to the target caused by acquisition abandonment, our results imply that a target firm should assume a cautious stance when it is engaged in a transaction with a firm from a country of similar or higher economic status.

Second, from an acquirer's perspective, decision makers should adopt a balanced position toward the risk associated with a new investment. The results of this study show that there is a tendency for managers' decision-making behaviors regarding completion to be determined by factors that affect their attitudes and abilities related to the risk of an acquisition at hand. While managers are required to accept risk in some instances and avoid risk in others, they need to be aware of such factors to avoid—to the greatest extent possible—being unconsciously distracted from the objective assessment of a transaction.

Third, this paper reminds policymakers and regulators of their role in cross-border acquisitions. With an in-depth understanding of the nature of the ever-increasing number of cross-border deals, governments can effectively promote or curb attempts to maximize expected benefits while minimizing associated costs. Overall, our results suggest that the economic distance between the countries of an acquirer and a target is a relevant factor considered by managers, and it may be useful to governments.

The current study has several limitations and raises questions that should be considered in future studies. First, although we did not detect any critical differences between our sample and the population, our sample represents a small portion of the total number of cases in the database. Second, while we concentrated on the key decision makers' perspectives based on the consideration of takeover processes, deals can also be blocked—directly or indirectly—by regulatory or political forces that may not be covered by our control variables. The low level of variance explained by our empirical models—especially for acquisition duration—may reflect the effects of factors to be further explored. Third, while the completion of a cross-border acquisition itself can manifest one of the dimensions of organizational success from the acquirer's viewpoint, it never guarantees success or value enhancement for the combined entity. Examining the factors underlying the completion or abandonment of acquisitions in association with subsequent performance after deal resolution would offer broader and more meaningful insight into the public takeover process. Finally, there may be notable moderating variables that influence decision makers' intention and ability (e.g., managers' dispositions). Future studies that properly consider these aspects will indeed help increase our understanding of acquisitions in the international business environment.

Acknowledgement

We thank anonymous reviewers for their constructive comments and acknowledge Sang-Do Kim's contribution to the earlier version of the manuscript.

References

- Amburgey, T. L., & Miner, A. S. (1992). Strategic momentum: The effects of repetitive, positional, and contextual momentum on merger activity. *Strategic Management Journal*, 13(5), 335–348. <http://dx.doi.org/10.1002/smj.4250130503>.
- Asquith, P. (1983). Merger bids, uncertainty, and stockholder returns. *Journal of Financial Economics*, 11(1), 51–83. [http://dx.doi.org/10.1016/0304-405X\(83\)90005-3](http://dx.doi.org/10.1016/0304-405X(83)90005-3).
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Barkema, H. G., & Schijven, M. (2008). How do firms learn to make acquisitions? A review of past research and an agenda for the future. *Journal of Management*, 34(3), 594–634. <http://dx.doi.org/10.1177/0149206308316968>.
- Bates, T. W., & Lemmon, M. L. (2003). Breaking up is hard to do? An analysis of termination fee provisions and merger outcomes. *Journal of Financial Economics*, 69(3), 469–504. [http://dx.doi.org/10.1016/S0304-405X\(03\)00120-X](http://dx.doi.org/10.1016/S0304-405X(03)00120-X).
- Baum, J. A. C., Li, S. X., & Usher, J. M. (2000). Making the next move: How experiential and vicarious learning shape the locations of chains' acquisitions. *Administrative Science Quarterly*, 45(4), 766–801. <http://dx.doi.org/10.2307/2667019>.
- Berger, P. G., & Ofek, E. (1995). Diversification's effect on firm value. *Journal of Financial Economics*, 37(1), 39–65. [http://dx.doi.org/10.1016/0304-405X\(94\)00798-6](http://dx.doi.org/10.1016/0304-405X(94)00798-6).
- Berry, H., Guillén, M. F., & Zhou, N. (2010). An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9), 1460–1480. <http://dx.doi.org/10.1057/jibs.2010.28>.
- Boeh, K. K. (2011). Contracting costs and information asymmetry reduction in cross-border M&A. *Journal of Management Studies*, 48(3), 568–590. <http://dx.doi.org/10.1111/j.1467-6486.2010.00938.x>.
- Bolger, A. (2014). Cross-border M&A deals at post-crisis high. <http://www.ft.com/intl/cms/s/0/facfbda8-1be6-11e4-9db1-00144feabd0.html#axzz3nj6AJrG>.
- Boone, A. L., & Mulherin, J. H. (2007). How are firms sold? *Journal of Finance*, 62(2), 847–875. <http://dx.doi.org/10.1111/j.1540-6261.2007.01225.x>.
- Capron, L. (1999). The long-term performance of horizontal acquisitions. *Strategic Management Journal*, 20(11), 987–1018. [http://dx.doi.org/10.1002/\(SICI\)1097-0266\(199911\)20:11<987::AID-SMJ61>3.0.CO;2-B](http://dx.doi.org/10.1002/(SICI)1097-0266(199911)20:11<987::AID-SMJ61>3.0.CO;2-B).
- Chakrabarti, A., & Mitchell, W. (2016). The role of geographic distance in completing related acquisitions: Evidence from US chemical manufacturers. *Strategic Management Journal*, 37(4), 673–694. <http://dx.doi.org/10.1002/smj.2366>.
- Chakrabarti, R., Gupta-Mukherjee, S., & Jayaraman, N. (2009). Mars-Venus marriages: Culture and cross-border M&A. *Journal of International Business Studies*, 40(2), 216–236. <http://dx.doi.org/10.1057/jibs.2008.58>.
- Chen, G., Crossland, C., & Huang, S. (2016). Female board representation and corporate acquisition intensity. *Strategic Management Journal*, 37(2), 303–313. <http://dx.doi.org/10.1002/smj.2323>.
- Collins, J. D., Holcomb, T. R., Certo, S. T., Hitt, M. A., & Lester, R. H. (2009). Learning by doing: Cross-border mergers and acquisitions. *Journal of Business Research*, 62(12), 1329–1334. <http://dx.doi.org/10.1016/j.jbusres.2008.11.005>.
- Datta, D. K., Pinches, G. E., & Narayanan, V. K. (1992). Factors influencing wealth creation from mergers and acquisitions: A meta-analysis. *Strategic Management Journal*, 13(1), 67–84. <http://dx.doi.org/10.1002/smj.4250130106>.
- DeLong, G., & DeYoung, R. (2007). Learning by observing: Information spillovers in the execution and valuation of commercial bank M&As. *Journal of Finance*, 62(1), 181–216. <http://dx.doi.org/10.1111/j.1540-6261.2007.01205.x>.
- Di Giovanni, J. (2005). What drives capital flows? The case of cross-border M&A activity and financial deepening. *Journal of International Economics*, 65(1), 127–149. <http://dx.doi.org/10.1016/j.jinteco.2003.11.007>.
- Dikova, D., Rao Sahib, P., & van Witteloostuijn, A. (2010). Cross-border acquisition abandonment and completion: The effect of institutional differences and organizational learning in the international business service industry, 1981–2001. *Journal of International Business Studies*, 41(2), 223–245. <http://dx.doi.org/10.1057/jibs.2009.10>.
- Forssbäck, J., & Oxelheim, L. (2008). Finance-specific factors as drivers of cross-border investment—An empirical investigation. *International Business Review*, 17(6), 630–641. <http://dx.doi.org/10.1016/j.ibusrev.2008.09.001>.
- Gaur, A. S., & Lu, J. W. (2007). Ownership strategies and survival of foreign subsidiaries: Impacts of institutional distance and experience. *Journal of Management*, 33(1), 84–110. <http://dx.doi.org/10.1177/0149206306295203>.
- Gubbi, S. R., Aulakh, P. S., Ray, S., Sarkar, M. B., & Chittoor, R. (2010). Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms. *Journal of International Business Studies*, 41(3), 397–418. <http://dx.doi.org/10.1057/jibs.2009.47>.
- Haleblian, J., & Finkelstein, S. (1999). The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective. *Administrative Science Quarterly*, 44(1), 29–56. <http://dx.doi.org/10.2307/2667030>.
- Haleblian, J., Kim, J. Y. J., & Rajagopalan, N. (2006). The influence of acquisition experience and performance on acquisition behavior: Evidence from the U.S. commercial banking industry. *Academy of Management Journal*, 49(2), 357–370. <http://dx.doi.org/10.5465/AMJ.2006.20786083>.
- Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. (2009). Taking stock of what we know about mergers and acquisitions: A review and research agenda. *Journal of Management*, 35(3), 469–502. <http://dx.doi.org/10.1177/0149206308330554>.
- Hansen, R. (2001). Auctions of companies. *Economic Inquiry*, 39(1), 30–43. <http://dx.doi.org/10.1093/ei/39.1.30>.

- Hayward, M. L. A. (2002). When do firms learn from their acquisition experience? Evidence from 1990 to 1995. *Strategic Management Journal*, 23(1), 21–39. <http://dx.doi.org/10.1002/smj.207>.
- Healy, P. M., Palepu, K. G., & Ruback, R. S. (1992). Does corporate performance improve after mergers? *Journal of Financial Economics*, 31(2), 135–175. [http://dx.doi.org/10.1016/0304-405X\(92\)90002-F](http://dx.doi.org/10.1016/0304-405X(92)90002-F).
- Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *Journal of International Business Studies*, 14(2), 75–89. <http://dx.doi.org/10.1057/palgrave.jibs.8490867>.
- Holl, P., & Kyriazis, D. (1996). The determinants of outcome in UK take-over bids. *International Journal of the Economics of Business*, 3(2), 165–184. <http://dx.doi.org/10.1080/758528451>.
- Hope, O., Thomas, W., & Vyas, D. (2011). The cost of pride: Why do firms from developing countries bid higher? *Journal of International Business Studies*, 42(1), 128–151. <http://dx.doi.org/10.1057/jibs.2010.5>.
- Hunter, W. C., & Jagtiani, J. (2003). An analysis of advisor choice, fees, and effort in mergers and acquisitions. *Review of Financial Economics*, 12(1), 65–81. [http://dx.doi.org/10.1016/S1058-3300\(03\)00007-7](http://dx.doi.org/10.1016/S1058-3300(03)00007-7).
- Ingram, P., & Baum, J. A. (1997). Opportunity and constraint: Organizations' learning from the operating and competitive experience of industries. *Strategic Management Journal*, 18, 75–98.
- Jemison, D. B., & Sitkin, S. B. (1986). Acquisitions: The process can be a problem. *Harvard Business Review*, 64(2), 107–116.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. <http://dx.doi.org/10.2307/1914185>.
- Kim, J. Y. J., Halebian, J. J., & Finkelstein, S. (2011). When firms are desperate to grow via acquisition: The effect of growth patterns and acquisition experience on acquisition premiums. *Administrative Science Quarterly*, 56(1), 26–60. <http://dx.doi.org/10.2189/asqu.2011.56.1.026>.
- King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of post-acquisition performance: Indications of unidentified moderators. *Strategic Management Journal*, 25(2), 187–200. <http://dx.doi.org/10.1002/smj.371>.
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), 411–432. <http://dx.doi.org/10.1057/palgrave.jibs.8490394>.
- Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1), 64–81. <http://dx.doi.org/10.5465/amr.1999.1580441>.
- Larsson, R., & Finkelstein, S. (1999). Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. *Organization Science*, 10(1), 1–26. <http://dx.doi.org/10.1287/orsc.10.1.1>.
- Lim, M., & Lee, J. (2016). The effects of industry relatedness and takeover motives on cross-border acquisition completion. *Journal of Business Research*, 69(11), 4787–4792. <http://dx.doi.org/10.1016/j.jbusres.2016.04.031>.
- Lubatkin, M. (1983). Mergers and the performance of the acquiring firm. *Academy of Management Review*, 8(2), 218–225. <http://dx.doi.org/10.5465/AMR.1983.4284724>.
- Luo, Y. (2005). Do insiders learn from outsiders? Evidence from mergers and acquisitions. *Journal of Finance*, 60(4), 1951–1982. <http://dx.doi.org/10.1111/j.1540-6261.2005.00784.x>.
- March, J. G., & Shapira, Z. (1987). Managerial perspectives on risk and risk taking. *Management Science*, 33(11), 1404–1418. <http://dx.doi.org/10.1287/mnsc.33.11.1404>.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87. <http://dx.doi.org/10.1287/orsc.2.1.71>.
- Meyer, C. B., & Altenborg, E. (2008). Incompatible strategies in international mergers: The failed merger between Telia and Telenor. *Journal of International Business Studies*, 39(3), 508–525. <http://dx.doi.org/10.1057/palgrave.jibs.8400354>.
- Miner, A. S., & Haunschild, P. R. (1995). Population-level learning. *Research in Organizational Behavior*, 17, 115–166.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73(2), 201–228. <http://dx.doi.org/10.1016/j.jfineco.2003.07.002>.
- Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1), 137–158. <http://dx.doi.org/10.1057/palgrave.jibs.8490029>.
- Muehlfeld, K., Rao Sahib, P., & Van Witteloostuijn, A. (2012). A contextual theory of organizational learning from failures and successes: A study of acquisition completion in the global newspaper industry, 1981–2008. *Strategic Management Journal*, 33(8), 938–964. <http://dx.doi.org/10.1002/smj.1944>.
- Officer, M. S. (2003). Termination fees in mergers and acquisitions. *Journal of Financial Economics*, 69(3), 431–467. [http://dx.doi.org/10.1016/S0304-405X\(03\)00119-3](http://dx.doi.org/10.1016/S0304-405X(03)00119-3).
- Pablo, A. L., Sitkin, S. B., & Jemison, D. B. (1996). Acquisition decision-making processes: The central role of risk. *Journal of Management*, 22(5), 723–746. <http://dx.doi.org/10.1177/014920639602200503>.
- Pablo, A. L. (1994). Determinants of acquisition integration Level: A decision-making perspective. *Academy of Management Journal*, 37(4), 803–836. <http://dx.doi.org/10.2307/256601>.
- Pablo, E. (2009). Determinants of cross-border M&As in Latin America. *Journal of Business Research*, 62(9), 861–867. <http://dx.doi.org/10.1016/j.jbusres.2008.10.004>.
- Palepu, K. G. (1986). Predicting takeover targets: A methodological and empirical analysis. *Journal of Accounting and Economics*, 8(1), 3–35. [http://dx.doi.org/10.1016/0165-4101\(86\)90008-X](http://dx.doi.org/10.1016/0165-4101(86)90008-X).
- Popli, M., Akbar, M., Kumar, V., & Gaur, A. (2016). Reconceptualizing cultural distance: The role of cultural experience reserve in cross-border acquisitions. *Journal of World Business*, 51(3), 404–412. <http://dx.doi.org/10.1016/j.jwb.2015.11.003>.
- Porzio, M. (2015). M&A volume will hit an all-time high: Is this a bubble? <http://www.forbes.com/sites/mattporzio/2015/07/31/2015-ma-volume-will-hit-an-all-time-high-is-this-a-bubble/>.
- Prasad, E., Rajan, R., & Subramanian, A. (2006). Patterns of international capital flows and their implications for economic development. *The New economic geography: Effects and policy implications*. Kansas City: Federal Reserve Bank of Kansas City 119–158.
- Puranam, P., Powell, B. C., & Singh, H. (2006). Due diligence failure as a signal detection problem. *Strategic Organization*, 4(4), 319–348. <http://dx.doi.org/10.1177/1476127006069426>.
- Rossi, S., & Volpin, P. F. (2004). Cross-country determinants of mergers and acquisitions. *Journal of Financial Economics*, 74(2), 277–304. <http://dx.doi.org/10.1016/j.jfineco.2003.10.001>.
- Rumelt, R. P. (1982). Diversification strategy and profitability. *Strategic Management Journal*, 3(4), 359–369. <http://dx.doi.org/10.1002/smj.4250030407>.
- Schwert, G. W. (1996). Markup pricing in mergers and acquisitions. *Journal of Financial Economics*, 41(2), 153–192. [http://dx.doi.org/10.1016/0304-405X\(95\)00865-C](http://dx.doi.org/10.1016/0304-405X(95)00865-C).
- Shimizu, K., Hitt, M. A., Vaidyanath, D., & Pisano, V. (2004). Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future. *Journal of International Management*, 10(3), 307–353. <http://dx.doi.org/10.1016/j.intman.2004.05.005>.
- Singh, H., & Montgomery, C. A. (1987). Corporate acquisition strategies and economic performance. *Strategic Management Journal*, 8(4), 377–386. <http://dx.doi.org/10.1002/smj.4250080407>.
- Sitkin, S. B., & Weingart, L. R. (1995). Determinants of risky decision-making behavior: A test of the mediating role of risk perceptions and propensity. *Academy of Management Journal*, 38(6), 1573–1592. <http://dx.doi.org/10.2307/256844>.
- Tang, L., & Koveos, P. E. (2008). A framework to update Hofstede's cultural value indices: Economic dynamics and institutional stability. *Journal of International Business Studies*, 39(6), 1045–1063. <http://dx.doi.org/10.1057/palgrave.jibs.8400399>.
- Tobin, J. (1958). Estimation of relationships for limited dependent variables. *Econometrica*, 26(1), 24–36. <http://dx.doi.org/10.2307/1907382>.
- Tsang, E. W. K., & Yip, P. S. L. (2007). Economic distance and the survival of foreign direct investments. *Academy of Management Journal*, 50(5), 1156–1168. <http://dx.doi.org/10.2307/20159917>.
- United Nations (2000). World investment report. *United nations conference on trade and development*. http://unctad.org/en/Docs/wir2000overview_en.pdf.
- United Nations (2008). World investment report. *United nations conference on trade and development*. http://unctad.org/en/Docs/wir2008overview_en.pdf.
- Vahlne, J. E., & Nordström, K. A. (1992). Is the globe shrinking: Psychic distance and the establishment of Swedish sales subsidiaries during the last 100 years. *International trade and finance association annual conference*.
- Very, P., & Schweiger, D. M. (2001). The acquisition process as a learning process: Evidence from a study of critical problems and solutions in domestic and cross-border deals. *Journal of World Business*, 36(1), 11–31. [http://dx.doi.org/10.1016/S1090-9516\(00\)00052-3](http://dx.doi.org/10.1016/S1090-9516(00)00052-3).
- Wong, P., & O'sullivan, N. (2001). The determinants and consequences of abandoned takeovers. *Journal of Economic Surveys*, 15(2), 145–186. <http://dx.doi.org/10.1111/1467-6419.00135>.
- World Bank (2014). *World development indicators*. Washington, DC: World Bank.
- Zander, U., & Zander, L. (2010). Opening the grey box: Social communities, knowledge and culture in acquisitions. *Journal of International Business Studies*, 41(1), 27–37. <http://dx.doi.org/10.1057/jibs.2009.76>.
- Zhang, J., & He, X. (2014). Economic nationalism and foreign acquisition completion: The case of China. *International Business Review*, 23(1), 212–227. <http://dx.doi.org/10.1016/j.ibusrev.2013.04.002>.
- Zhang, J., Zhou, C., & Ebberts, H. (2011). Completion of Chinese overseas acquisitions: Institutional perspectives and evidence. *International Business Review*, 20(2), 226–238. <http://dx.doi.org/10.1016/j.ibusrev.2010.07.003>.