Journal of International Business Studies (2004) 35, 19–32

www.jibs.net

Mitigating risk in international mergers and acquisitions: the role of contingent payouts

Jeffrey J Reuer[1], Oded Shenkar[2] and Roberto Ragozzino[2]

[1]*Kenan-Flagler Business School, University of North Carolina, Chapel Hill, NC, USA;* [2]*Fisher College of Business, The Ohio State University, Columbus, OH, USA*

Correspondence: Dr JJ Reuer, Kenan-Flagler Business School, University of North Carolina, McColl Building, Chapel Hill, NC 27599, USA.
Tel: +1 919 962 4514;
Fax: +1 919 962 4266;
E-mail: reuer@unc.edu

Received: 5 March 2002
Revised: 27 June 2003
Accepted: 22 August 2003
Online publication date: 13 November 2003

Abstract

Previous internationalization studies have focused on the entry modes employed by multinational firms but have not considered the contractual heterogeneity that underlies each mode. It is important to examine these contractual details, as the firm may be able to obtain some of the benefits typically associated with one entry mode while selecting another. In the case of international mergers and acquisitions (M&As), a key contractual variable is whether the parties agree to a performance-contingent payout structure, which can mitigate the risk of adverse selection. In this paper, we examine the antecedents of contingent payouts in the form of earnouts and stock payments. The results indicate that firms lacking international and domestic acquisition experience turn to contingent payouts when purchasing targets in high-tech and service industries. Firms tend to avoid contingent payouts in host countries with problems with investor protection and legal enforceability.
Journal of International Business Studies (2004) **35,** 19–32. doi:10.1057/palgrave.jibs.8400053

Keywords: contingent earnouts; international mergers and acquisitions; adverse selection

Introduction

International mergers and acquisitions (M&As) have become a primary mode of internationalization in recent years (UNCTAD, 2000). As is the case for other internationalization modes, however, foreign acquisitions often suffer from the acquirer's 'liability of foreignness' in the form of unfamiliarity with the target country, its culture, and its institutions (Zaheer, 1995), and this is especially true when the firm has little or no prior experience in international markets (e.g., Johanson and Vahlne, 1977). Multinational firms conducting acquisitions may also be unfamiliar with potential targets, and may find it difficult to assess the value of the resources that a target firm brings to the transaction.

Significant inefficiencies can therefore pervade international M&A markets. For instance, extension of Akerlof's (1970) 'market for lemons' model from product markets to the M&A market suggests that when bidders cannot efficiently value targets, and targets for their part cannot credibly convey the value of their resources, then otherwise attractive deals may not go forward just as other, less attractive acquisitions proceed. In the latter instance, if suitable contractual or institutional remedies for this information asymmetry problem are lacking, the acquirer bears a significant risk of failing to capture value from the deal, because of the risk of overpayment or from incurring excessive transaction costs during the due diligence and negotiation processes.

Although these challenges have been emphasized in domestic acquisitions, they are especially interesting to consider in the international M&A context because of firms' heightened internal uncertainty (Gatignon and Anderson, 1988) and incomplete knowledge (Lee and Caves, 1998), and the differences that exist in such things as cultures, legal environments, and accounting standards, which can increase transaction costs when conducting acquisitions abroad (Markides and Ittner, 1994; Datta and Puia, 1995). Firms may therefore benefit from developing appropriate remedies for the problem of asymmetric information in order to obtain the potential benefits that international M&As hold out.

Although various contractual or other remedies may be available to bidding firms, the existing international literature emphasizes that some firms might respond to problems of asymmetric information by simply avoiding an acquisition altogether and turning instead to a less commitment-intensive form of investment such as a joint venture. The internationalization process school, for example, suggests that firms tend to increase their level of commitment to foreign markets incrementally, in order to reduce risk until they gain familiarity with the target market (e.g., Johanson and Vahlne, 1977). Similarly, research on foreign market entry modes has identified asymmetric information and other sources of inefficiencies surrounding international M&As that lead firms to opt for joint ventures (e.g., Balakrishnan and Koza, 1993; Hennart and Reddy, 1997; Reuer and Koza, 2000).

While prior research has emphasized the attractiveness of alternative entry modes as a solution to asymmetric information in international M&As, it is still possible for the firm to go forward with an acquisition, but institute a contractual remedy to the problem of asymmetric information. For example, firms can design a performance-contingent payout that yields higher payments to the target if the deal is more successful and lower payments if it is less successful. Structuring payments to the target firm in this fashion may not directly alleviate resource valuation problems, but the consequences of a distorted valuation are mitigated by way of transferring part of the acquirer's downside risk to the target firm. Because higher-quality targets will find such contracts less costly than lower-quality targets, these arrangements may also be seen as a valuable signaling mechanism for target firms (Spence, 1974). By examining the contractual details of international M&As rather than treating entry modes in a more discrete fashion at an aggregate level, we therefore suggest that firms may be able to obtain some of the benefits typically associated with one entry mode (i.e., joint venture), while still selecting a different entry mode (i.e., acquisition).

Our analysis considers two types of contingent payout: stock payments and contingent earnouts. Prior finance research suggests that the decision to use these forms of consideration can have important performance implications for acquirers (Chang, 1998; Kohers and Ang, 2000). Stock payments are relatively more commonplace, and studies of domestic acquisitions indicate that bidders choose this form of payment in M&A deals subject to asymmetric information (Hansen, 1987; Fishman, 1989). However, such payouts also suffer from the drawback of signaling to equity investors that the bidder's stock is overvalued (e.g., Eckbo *et al.*, 1990), so the former benefit of mitigating the effects of asymmetric information regarding the target's resources needs to be weighed against the latter cost of signaling overvaluation of the acquirer's stock.

Contingent earnouts, by contrast, are deferred variable payments tied to the target's ability to meet prespecified performance goals within a certain time frame after the deal has been consummated. Thus, as in the case of joint ventures, the target firm can obtain a share of the business's profit stream, but, in contrast to joint ventures, ownership by the acquiring party can be complete, no separate business entity is established, and the payment period is predetermined (commonly 3–5 years). Earnouts can hence be an efficient means of transferring risk from a bidder to a more informed target, but, given their focus and contractual specificity, they can also suffer from moral hazard problems due to potential contractual incompleteness and enforceability problems, which may be one reason why they are not used more frequently (Sherman and Janatka, 1992). Kohers and Ang (2000) note, however, that the median valuation effect in earnout transactions for both acquirers and targets is significantly higher than for similar acquisitions involving other payment structures under conditions of information asymmetry. With these benefits and liabilities in mind, the objective of the present study is to assess contingent payouts as contractual remedies for the problem of asymmetric information in international M&As and begin to understand the conditions under which firms find it more or less attractive to design their M&As with this feature.

Literature review

Research on international acquisitions

Research on international M&As, while growing, has not been as voluminous as the large body of research on both domestic M&As and international alliances. This is somewhat surprising because M&As have constituted a major route for internationalization in recent years. In fact, M&As have been increasing their share of global foreign direct investment at the expense of greenfield investment (UNCTAD, 2000). Much of the existing research on international M&As has been conducted within the entry mode stream, in which the merger or acquisition is portrayed as a strategic alternative to an alliance on the one hand or to greenfield investment on the other (e.g., Erramilli, 1991; Cho and Padmanabhan, 1995; Brouthers and Brouthers, 2000).

One stream of M&A research has focused on whether and when such investments create value. As in the domestic context, the evidence on whether international acquisitions create value for acquirers on average is mixed (e.g., Doukas and Travlos, 1988; Cakici *et al.*, 1996). However, various sources of wealth creation and destruction are evident for international acquisitions. For instance, consistent with the internalization view, research has shown that firms with intangible resources tend to expand abroad through acquisitive growth and generate abnormal returns (e.g., Morck and Yeung, 1992; Markides and Ittner, 1994; Anand and Kogut, 1997). Gains from reverse internalization, or the economies an acquirer obtains by appropriating the rents generated by the intangible assets of the target and exploiting them on a broader scale, are also evident inasmuch as bidders gain from acquiring targets with intangible assets (Eun *et al.*, 1996). Seth *et al.*'s (2000, 2002) analyses concluded that the firm's desire to realize synergies is the predominant explanation for cross-border acquisitions. Recent studies also present some evidence, however, that managers embark on international M&As to maximize their own utility at the expense of the firm's shareholders, and that managers make mistakes in assessing the values of target firms while presuming that their valuations of these firms are correct (Seth *et al.*, 2000, 2002).

Studies have also indicated how the performance implications and managerial challenges of international and domestic acquisitions compare. For instance, Harris and Ravenscraft (1991) conclude that the market reacts more favorably to international acquisitions than to domestic acquisitions (see also Shaked *et al.*, 1991), yet this finding may reflect differences in industry mixes across samples of domestic and international M&As (e.g., Dewenter, 1995). Other evidence exists that international acquisitions tend to be subjected to great information challenges. For instance, foreign acquirers tend to pay much more for targets, which may account for the greater abnormal returns noted for the latter; international acquisitions more often involve R&D-intensive targets (Harris and Ravenscraft, 1991; Shaked *et al.*, 1991); and firms tend to avoid acquisitions in favor of less commitment-intensive entry modes when national cultural differences are substantial (Johanson and Vahlne, 1977; Gatignon and Anderson, 1988; Kogut and Singh, 1988), although mixed findings and debate exist on the effects of cultural distance on acquisitions and other forms of FDI (Morosini *et al.*, 1998; Brouthers and Brouthers, 2001; Shenkar, 2001).

Research on payment mode in M&As

A significant body of research in finance highlights alternative ways of structuring acquisition deals in order to manage some of the problems noted earlier. Martin (1996), for instance, describes three classes of explanation for choosing a method of payment in acquisitions based on liquidity (Mayer and Walker, 1996), agency (e.g., Stulz, 1988; Walkling and Long, 1984; Amihud *et al.*, 1990), and asymmetric information considerations (e.g., Hansen, 1987; Fishman, 1989; Eckbo *et al.*, 1990). With respect to the last issue, the acquirer is apt to be penalized by the stock market for issuing stock for the international acquisition (Travlos, 1987), as this action may signal to equity investors that managers believe their stock is overvalued. However, when firms purchase targets that are more likely to involve asymmetric information, the stock market tends to reward rather than punish the use of stock as a method of payment because, under these circumstances, the benefits of mitigating the effects of information asymmetries regarding the target firm's resources can exceed the potential costs of any adverse signals about the acquirer's stock valuation (Chang, 1998).

Theory and hypotheses

The hypotheses developed in this section explain when firms may find it more or less attractive to use contingent payouts in their international acquisitions. The hypotheses begin by relying upon Akerlof's (1970) model of the market for lemons in product markets within the domain of international M&As. Specifically, building upon his model and the arguments above, we develop hypotheses that link conditions under which information asymmetry problems are more likely to surround international M&A deals than firms' adoption of contingent payout structures. Following prior literature on foreign market entry modes, we also suggest that partial acquisitions may provide a substitute for contingent payout structures in mitigating the effects of information asymmetry. Finally, in order to address the moral hazard problems that can also influence the effectiveness of contingent payout structures, we conclude with a discussion of how investor protection and enforceability concerns in the host country may shape acquiring firms' deal-structuring decisions.

Core *vs* non-core acquisitions

Our first prediction stemming from the extension of Akerlof's (1970) model to the international M&A market is that contingent payouts will be more attractive when a firm is using an acquisition to enter a new product market than when it is using it to strengthen its position in its core business. In its primary business, the firm is better able to value potential targets because it is more familiar with pertinent technologies, employee skills, and other resources. During the negotiations process, the acquirer is in a good position to evaluate the target firm's claims about its prospects, which reduces the likelihood of misrepresentation and adverse selection. Further, in horizontal acquisitions, the two firms will tend to have greater similarities in business practices and organizational routines than is the case in inter-industry transactions (Gordon, 1991), so the risk of encountering valuation problems is less severe.

By contrast, when acquiring businesses in non-core domains, a firm will be less familiar with targets and less knowledgeable about the value of their underlying resources. This enhances the possibility of adverse selection, as the bidder is less able to evaluate the claims made by the target firm concerning its resources or prospects. Contingent payouts reduce the acquirer's downside risk and provide the target with a way to signal value, as high-quality targets are rewarded and low-quality targets are penalized based on their *ex post* performance.

> **Hypothesis 1**: The likelihood that a foreign acquirer will use a contingent payout will be greater for a target in a non-core business than in the acquirer's primary business.

Industry context of the acquisition

The benefits of contingent payouts hinge not only on the relationship of the target firm to the acquirer, but also on the fundamental nature of the resources to be acquired. For example, it may be the case that a firm is undertaking an acquisition in an unfamiliar product-market domain, but that the industry entered relies heavily on commodities or other resources that are easier to value. In such settings the possibility of adverse selection is reduced, as market prices or indexes may provide a more accurate value assessment of the target's resources. The more codified the resource, the easier and more accurate the valuation as well (Kogut and Zander, 1992).

By contrast, in industries more reliant on human capital and intangible assets, valuation problems are considerably more severe. In high-tech or service industries, for instance, there will be greater uncertainty concerning the value of the target, as the values of key resources are not adequately reflected in a codified form such as a financial statement. Under such circumstances, more of the value of the target firm will be tied to its growth options than to its assets in place. Information provided by the target firm regarding such resources is more difficult to verify, providing a greater incentive for target firm managers to inflate their representations of the target firm's value. Moreover, to the extent that the knowledge base of the target is tacit, it is also more difficult to assess the transferability of this knowledge during the process of negotiation (Coff, 1999). These problems are magnified in an international environment because tacit resources are more difficult to translate or convert into a unified measure, and because they are likely to be embedded in an institutional network that is also difficult for an outsider to decipher. Under such circumstances the risk-reduction and signaling benefits of contingent payouts can be particularly valuable to the acquirer.

Hypothesis 2a: The likelihood that a foreign acquirer will use a contingent payout will be greater for targets in high-tech industries than in other industries.

Hypothesis 2b: The likelihood that a foreign acquirer will use a contingent payout will be greater for targets in service industries than in other industries.

International acquisition experience

When considering how bidders seek to structure M&A deals, it is important to bear in mind that acquirers are apt to have very different capabilities for scanning for partners, evaluating them, conducting negotiations, and so forth (Zahra *et al.*, 2000). These capabilities may develop through experiential learning, which may improve firm performance along a number of dimensions (Vermeulen and Barkema, 2001). The question in this study is whether the firm's acquisition experience enables it to value and manage acquisitions more effectively so that contractual remedies such as earnouts and stock consideration become less necessary. Dyer and Singh (1998) and Anand and Khanna (2000) suggest that firms with alliance experience may develop superior partnering capability, yet it is also the case that the evidence on experiential learning in the context of external corporate development is mixed to date (e.g., Barkema, Shenkar, Vermeulen and Bell, 1997; Simonin, 1997).

Prior acquisition experience may likewise yield a number of benefits that can translate into hazard-mitigating capabilities germane to the due diligence and negotiations stages of the acquisition. For instance, experience may help firms to obtain more pertinent information on potential targets and may help acquirers to execute the initial stages of the acquisition process more effectively. These arguments suggest that experienced firms might be in a better position to evaluate potential targets, assess sellers' claims, and reduce the incentives for misrepresentations. The internationalization process view similarly suggests that such firms will tend to experience lower levels of perceived risk than inexperienced firms (Johanson and Vahlne, 1977), and the latter will therefore find it attractive in their first few international acquisitions to reduce the risk of adverse selection by using contingent payouts to transfer risk to the target firms.

Hypothesis 3: The likelihood that a foreign acquirer will use a contingent payout will be negatively related to its international acquisition experience.

Because domestic acquisition experience may also yield valuable lessons that the firm can apply to its investments in international acquisitions, we differentiated domestic and international acquisition experience for the sake of completeness as well as to compare their effects. Some of the generic capabilities cultivated through the tacit accumulation of M&A experience in the domestic setting may well translate into a lower need for share contracting in cross-border deals, for reasons paralleling those offered above (see also Pennings *et al.*, 1994; Haleblian and Finkelstein, 1999). At the same time, international M&A deals also have unique features such as greater internal uncertainty (Gatignon and Anderson, 1988) and differences in cultures as well as legal, tax, and regulatory environments (e.g., Markides and Ittner, 1994), and this heterogeneity across deals may be an obstacle to the successful transfer of experiential learning from prior domestic acquisitions (Zollo, 1998).

Equity position

Although contingent payouts represent one way of dealing with acquisition risks due to asymmetric information, clearly there are other alternatives. One that we consider here explicitly is for a firm to take a smaller equity position in a target. If the firm takes less than 100% of the target's equity, the risk it bears declines proportionally, and more of the risk is borne by the target firm: hence a contingent payout structure is less necessary. In countries in which the acquirer is otherwise able to acquire full ownership of the target firm, the target's willingness to continue to hold on to a portion of its equity also provides a positive signal to the acquirer. If the acquirer has a preferential claim on the remainder of the target's equity, then the acquirer can be seen as holding a real option that confers the right, but not the obligation, to expand its share of the acquisition in the future (e.g., Kogut, 1991). This option potentially mitigates the acquirer's downside risk and allows the firm to access future upside opportunities should conditions prove favorable. By contrast, in complete acquisitions the target is unable to signal value in this fashion, and the acquirer is more exposed to the risk of adverse selection and in need of some other remedy such as a contingent payout. Based on these arguments, and on prior finance research suggesting that cash payments are better suited for partial acquisitions rather than full acquisitions (Datta and Iskandar-Datta, 1995), we hypothesize:

Hypothesis 4: The likelihood that a foreign acquirer will use a contingent payout will be positively related to the equity stake purchased.

Legal protection and enforceability

Although the preceding hypotheses emphasize the benefits of contingent payouts in certain international acquisitions, their enforceability problems represent a significant potential shortcoming. Transaction cost theory would emphasize that these contracts will inevitably be incomplete, owing to bounded rationality and the complexity of international M&A deals. This in turn may lead to moral hazard problems as selling parties engage in opportunistic efforts to optimize their utility. For instance, targets may not incur costs needed to maintain assets, which in turn may improve the target's short-term payouts in earn-outs, but such maintenance activities may be in the best interests of the business long-term health.

We suspect that such difficulties will be more problematic when firms attempt to negotiate more complex deal structures in host countries with legal systems with weaker protection of investors and enforceability problems. The US and other Anglo-Saxon nations use a common law system that provides relatively strong protection of investor interests and legal enforceability, but many countries in continental Europe and Latin America use a civil law system that offers less protection of ownership rights and tends to broaden the range of events that justify non-compliance. It may therefore be more difficult for third parties to enforce contracts and protect the acquirer's interests in these countries (La Porta *et al.*, 1997). Moreover, the possibility of renegotiation in such settings raises the likelihood of hold-up and the incurrence of significant legal expenses. Thus the difficulties of contract implementation in such settings may offset some or all of the benefits of efficient risk transfers from bidder to target in contingent payouts.

Hypothesis 5: The likelihood that a foreign acquirer will use a contingent payout will be lower in non-common law nations than in nations with common law legal systems.

Methods

Sample

The base sample was developed from the Securities Data Corporation (SDC) database, and comprised international acquisitions conducted by US firms during the years 1995–1998. This database was selected because of its comprehensiveness, its ability to gauge acquisition activity by firms over time, and prior use in the field. Because we wanted to examine how the use of contingent payouts differed across partial and full acquisitions, we allowed the equity acquired to be less than 100%, but we eliminated observations for which the equity acquired fell short of 10%. Table 1 provides data on the sectoral distribution of contingent payouts in the sample. Forty-three percent of the deals were in the manufacturing sector and 24% were of service firms. Additional descriptive statistics are presented in the results section. After accounting for missing data, 1325 observations were available for analysis, 9.8% of which used a contingent payout. Thus the incidence of contingent payouts is low overall, yet the usage of such deal structures rises to 12% in countries with the most liberal regulations on FDI and then rises to 24.3% in high-tech industries and 25.9% in the service sector. Our objective, therefore, is to understand better how the usage of contingent payouts varies across different international investment contexts.

Model specification

The basic structure of the multivariate statistical models is as follows:

$$\begin{aligned}\text{Contingent payout} = &\\ &\beta_0 + \beta_1 \text{inter-industry transaction}\\ &+ \beta_2 \text{ high-tech industry}\\ &+ \beta_3 \text{ service industry}\\ &+ \beta_4 \text{ domestic acquisition experience}\\ &+ \beta_5 \text{ international acquisition experience}\\ &+ \beta_6 \text{ equity acquired} + \beta_7 \text{ common law}\\ &+ \beta \text{ controls} + \varepsilon \qquad (1)\end{aligned}$$

Although the objective is to develop a parsimonious model explaining when firms use contingent payouts in their international acquisitions, we

Table 1 Sectoral distribution of consideration types for international acquisitions

I	*II*	*III*	*IV*	*V*
Industry (SIC)	*Cash (row %)*	*Earnout (row %)*	*Stock (row %)*	*Total deals (col. %)*
Agriculture, forestry, and fishing (01–09)	9 (56.3)	0 (0)	3 (18.8)	16 (0.5)
Mining (10–14)	87 (64.0)	3 (2.2)	20 (14.7)	136 (4.4)
Construction (15–17)	7 (53.9)	0 (0)	0 (0)	13 (0.4)
Manufacturing (20–39)	577 (42.9)	23 (1.7)	80 (6.0)	1344 (43.4)
Transportation (40–47)	20 (25.3)	1 (1.3)	4 (5.1)	79 (2.6)
Communications (48)	48 (43.2)	2 (1.8)	17 (15.3)	111 (3.6)
Public utilities (49)	62 (68.9)	0 (0)	7 (7.8)	90 (2.9)
Wholesale trade (50–51)	68 (27.8)	4 (1.6)	23 (9.4)	245 (7.9)
Retail trade (52–59)	19 (30.2)	1 (1.6)	7 (11.1)	63 (2.0)
Finance, insurance, and real estate (60–67)	104 (40.5)	7 (2.7)	11 (4.3)	257 (8.3)
Services (70–89)	262 (35.5)	12 (1.6)	115 (15.6)	739 (23.9)
Public administration (91–99)	3 (60.0)	0 (0)	0 (0)	5 (0.2)
Total	1266 (40.9)	53 (1.7)	287 (9.3)	3098 (100)

The base sample consists of US firms acquiring targets abroad during the years 1995–1998. Relative frequencies in columns II–IV do not sum to 100% owing to other forms of consideration and missing data.

sought to control for other factors influencing the structuring of international M&As. At the firm level, we controlled for the acquirer's foreign sales intensity and financial leverage to account for other international experiences besides acquisitions that might enable a firm to implement its strategy through acquisitions as well as slack financial resources that might reduce a firm's desire to transfer risk to the target. At the individual deal level, we identified controls for deal value and target status (i.e., private *vs* public). At the industry level, we controlled for industry uncertainty in order to examine whether the use of contingent payouts can be explained by risk sharing alone rather than asymmetric information. At the host country level, we controlled for restrictions on FDI instituted by the host country government, cultural differences, and the host market's attractiveness. Additional details on these measures are provided in the next section.

Measures and data

Contingent payout

The dependent variable in Eq. (1) is a 0–1 variable indicating whether or not the US parent firm offered to buy the target with stock or a contingent earnout *vs* cash. This was determined with data obtained from the SDC database. Eq. (1) was therefore estimated using a binomial logit model to identify the conditions under which firms employ contingent payouts in their international acquisitions (i.e., contingent payout=1). Although the relatively small number of earnouts in the sample precluded the development of separate models for stock payments *vs* earnouts, in the discussion section we make note of more exploratory bivariate statistical tests to show how deals relying on stock payments and earnouts differ.

Explanatory variables

The overlap between the bidder's and target's businesses was proxied based on the SICs of the two firms' primary businesses. Inter-industry transaction equals 1 when the target operates in a different four-digit industry than the acquirer's core business, and 0 otherwise. In order to examine the sensitivity of the results to the construction of this measure, we also defined this variable based on two- and three-digit SIC codes, and similar results were obtained. As a last robustness check, we also implemented Coff's (1999) construct of knowledge distance between industries, and the same interpretations held. Data on the SICs of the acquirers and target firms were obtained from the SDC database.

We used two indicator variables to classify the industries in which target firms resided. High-tech industry was defined as 1 for target firms operating in high-tech industries, and 0 otherwise. The SDC database provides codes to distinguish targets in high-tech industries such as biotechnology, computer equipment, electronics, communications, and others (Kohers and Ang, 2000). Similarly, service industry was defined as 1 for targets operating in service industries (i.e., SIC 70–89), and 0 otherwise.

The firm's acquisition experience was measured by counting the number of acquisitions the firm engaged in during the 10 years prior to the focal transaction. Coefficient estimates were freed across domestic and international acquisition experience by using two count measures. As all of the sampled acquirers are US firms, domestic acquisition experience was defined as the log of 1 plus the number of acquisitions involving US targets in which the firm engaged. In the same fashion, international acquisition experience was defined as the log of 1 plus the number of acquisitions involving non-US targets. In both cases, the log transformation was implemented in order to remedy skewness that was evident for the pre-transformed count measures. Acquisition data necessary to construct these measures were obtained from searches using the SDC database. This database was also used to construct the measure equity acquired, which was the proportion of the target's equity the firm purchased in the transaction.

Finally, in order to gauge enforceability problems, we followed La Porta *et al.* (1997) in differentiating countries with an English-based legal system from countries with legal systems other than the one used in the US. Countries outside the US with a common law system include Australia, Canada, Hong Kong, India, Ireland, Israel, Kenya, Malaysia, New Zealand, Nigeria, Pakistan, Singapore, South Africa, Sri Lanka, Thailand, the UK, and Zimbabwe. Common law equals 1 if the target is located in one of these countries, and 0 otherwise. As noted below in the results section, we also performed additional analyses to differentiate target firms located in various non-common law countries.

Control variables

Two controls at the firm level were included in the specification to account for resources that might be related to the deal structures of international acquisitions as well as to the theoretical variables of interest. The acquiring firm's foreign sales intensity captured the firm's degree of internationalization and was measured as the proportion of its sales occurring outside the US. Financial leverage was included as an inverse indicator of the firm's slack financial resources and was measured as the ratio of the acquiring firm's long-term debt to equity. Data for these controls were obtained from Compustat.

At the individual deal level, we sought to control for deal attributes that might be related to our theoretical variables as well as the structuring of M&As, yet these controls contributed to significant losses in sample size (results available from the authors). For example, deal values were reported for roughly half of the transactions, and we determined in supplemental analyses that deal value was insignificant and that the inclusion or exclusion of this variable did not affect the interpretations of the other variables. We also controlled for the status of the target firm (i.e., public *vs* private), and the inclusion or exclusion of this control did not affect the results presented below.

At the industry level, we controlled for the level of volatility in the target firm's industry to determine whether firms are using contingent payouts simply to share risk *per se* rather than to transfer risk efficiently in the presence of adverse selection problems. Industry uncertainty was calculated as an *ex post* measure of the volatility of net sales in each industry using regression analysis over the 5-year time period preceding the acquisitions (e.g., Keats and Hitt, 1988). The specification was as follows:

$$\text{Industry sales} = \gamma_0 + \gamma_1\,\text{year} + \varepsilon \qquad (2)$$

Industry uncertainty was then measured as the standard error of the time trend parameter divided by the mean of industry sales. Data required for estimating the industry-specific regressions and calculating the proxy for industry uncertainty were obtained from Compustat.

Three controls were included in the specification in Eq. (1) to account for the host country's environment. The first variable captures restrictions on foreign direct investment in the host country. The investment restrictions variable is based on 18-month forecasts of restrictions on foreign direct investment from the political risk service appearing in *Planning Review* for the year preceding the acquisition announcement. These forecasts are reported on a scale from A+ to D−, and were converted to numerical scores on a 0–4 scale (Fladmoe-Lindquist and Jacque, 1995). We also instituted a control for uncertainty avoidance, as target firms in countries with high levels of uncertainty avoidance may be less willing to share risk with the acquiring firm (e.g., Barkema *et al.*, 1997). Data for this measure were obtained from

Hofstede (1980). Finally, host country growth was measured as the average annual growth rate in real GDP for the 5-year period preceding the acquisition. Data for host country growth rates were obtained from the *Statistical Yearbook*, the World Data database, and the *Monthly Bulletin of Statistics of the Republic of China*.

Results

Table 2 presents descriptive statistics and a correlation matrix for the variables. The data suggest that non-core acquisitions were often made by experienced acquiring firms expanding into high-tech industries (both $p<0.001$). The information for the M&A experience variables reflects the logarithmic transformation noted above. The average firm had 1.1 acquisitions in the past 10 years and 0.8 prior international acquisitions. Firms with greater international acquisition experience tended to have greater foreign sales intensity and financial leverage (both $p<0.001$), and were expanding into high-growth markets ($p<0.01$). The average firm's foreign sales represented 23% of its total sales. The average equity stake purchased was 84%, and in 69.9% of the deals the acquirer purchased 100% of the target's equity. More leveraged firms tended to make partial acquisitions, and firms tended to purchase less than full ownership in countries with high growth, investment restrictions, or non-common law legal systems (all $p<0.001$). UK firms were the leading targets with 20.6% of all M&As, followed by Canada with 14.1% and Germany with 10.4% of transactions.

Table 3 provides results for the multivariate analyses of the determinants of contingent payouts in international acquisitions. Model I provides a baseline specification consisting of the control variables. Model II augments this baseline specification with the theoretical variables of interest. Both models are highly significant ($p<0.001$). The table provides a log-likelihood value for each model k ($L(\beta_k)$, where $k=1, 2$) as well as a likelihood ratio test statistic (i.e., $\chi^2_{\text{d.f.I}-\text{d.f.II}}=-2[L(\beta_{\text{I}})-L(\beta_{\text{II}})]$), which demonstrates that Model II provides greater explanatory power than the model consisting only of the controls ($p<0.001$).

The results indicate that non-core acquisitions are no more or less likely to use contingent payouts than M&As within the firm's primary business. Three additional analyses were performed to explore this insignificant finding. First, we reconstructed the measure using SIC data at the two- and three-digit SIC level and found similar insignificant results. Second, we examined the knowledge distance between the bidding firm's industry and the industry of the target firm (Coff, 1999), but this measure of inter-industry differences was similarly insignificant. Third, we considered whether the insignificant findings for the inter-industry transaction variable as well as for the industry uncertainty variable might be explained by their potential interaction. We respecified the model to incorporate a multiplicative term involving inter-industry transaction and industry uncertainty, but no moderation effect was in evidence. However, firms do tend to utilize contingent payouts in international acquisitions in high-tech industries ($p<0.05$), and there is modest evidence of greater usage of contingent payouts in service industries ($p<0.10$). Likelihood ratio tests support the conclusion that the effects are the same across high-tech and service sectors (i.e., $\chi^2=0.43$, n.s.). Thus H1 was not supported and H2a and H2b received empirical support.

The results presented in Table 3 show that the likelihood of using a contingent payout declines as the firm accumulates domestic ($p<0.05$) or international ($p<0.01$) acquisition experience. These results provide support for Hypothesis 3. A likelihood ratio test indicates that the two experience variables jointly influence the likelihood of using a contingent payout (i.e., $\chi^2=41.55$, $p<0.001$). We also sought to explore whether international acquisition experience has more, or less, of an impact than domestic experience on the design of international acquisitions. However, a likelihood ratio test suggests that the parameter estimates for domestic and international acquisition experience are equivalent (i.e., $\chi^2=0.06$, n.s.), indicating that domestic acquisition experience is just as relevant as international experience in explaining firms' adoption of contingent payouts in their international acquisitions.

The results in Table 3 also indicate that the firm's likelihood of using a contingent payout increases as the percentage of equity it acquires increases ($p<0.05$). Hence Hypothesis 4 on the substitution effect of contingent payouts and partial acquisitions is supported.

Consistent with our final hypothesis on legal protection and enforceability conditions, the results indicate that US firms tend to select contingent payouts in host countries with common law systems, and they tend to avoid such contractual arrangements in countries with other types of

Table 2 Descriptive statistics and correlation matrix

Variable	*Mean*	*s.d.*	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*	*(9)*	*(10)*	*(11)*	*(12)*	*(13)*
(1) Contingent payout	0.10	0.30	—												
(2) Inter-industry transaction	0.66	0.48	−0.001	—											
(3) High-tech industry	0.30	0.46	0.12***	0.11***	—										
(4) Service industry	0.23	0.42	0.10***	0.03	0.28***	—									
(5) Domestic acquisition experience	0.17	0.38	−0.13***	0.14***	−0.07**	−0.01	—								
(6) International acquisition experience	0.31	0.63	−0.15***	0.03	0.10***	0.06*	0.46***	—							
(7) Equity acquired	0.84	0.28	0.12***	0.12**	0.08**	0.15***	−0.11***	−0.13***	—						
(8) Foreign sales intensity	0.23	0.24	−0.07**	−0.07*	0.001	−0.03	0.07*	0.26***	0.0001	—					
(9) Financial leverage	0.74	1.17	−0.08**	−0.02	−0.14***	−0.08*	0.18***	0.14***	−0.07**	−0.02	—				
(10) Industry uncertainty	0.04	0.03	0.03	0.01	−0.03	−0.01	−0.03	−0.03	−0.02	−0.02	0.03	—			
(11) Common law	0.50	0.50	0.10***	0.02	0.01	0.09***	−0.06*	−0.06*	0.11***	−0.10***	−0.04	0.02	—		
(12) Investment restrictions	0.45	0.35	−0.11***	−0.10***	−0.08**	−0.10***	0.04	0.04	−0.20***	0.06*	0.06*	0.02	−0.21***	—	
(13) Uncertainty avoidance	56.89	20.26	−0.005	0.06*	0.03	0.03	−0.003	0.02	−0.001	0.01	0.03	0.01	−0.11*	0.04	—
(14) Host country growth	0.02	0.02	−0.05*	0.00	−0.06*	−0.04	0.11***	0.09**	−0.18***	−0.10***	0.03	0.02	−0.09***	−0.04	0.06*

N=1325. †$p<0.10$, *$p<0.05$, **$p<0.01$, ***$p<0.001$.

legal systems. For M&A transactions with contingent payouts, 65% of them are in host countries with common law systems, whereas only 48% of the deals without such structures in are in host countries with common law systems.

In order to differentiate among countries with non-common law systems, we incorporated separate indicator variables for French, German, and Scandinavian systems, as the French/Civil system affords investors with the weakest protection and enforcement of property rights, and the German and Scandinavian systems are intermediate in terms of protection and enforceability relative to the common law system on the one hand and the French/Civil system on the other. This analysis revealed a negative effect of the French/Civil system ($p<0.05$), and the negative coefficient estimates for the German and Scandinavian systems did not reach statistical significance. Consistent with the work of La Porta *et al*. (1997), firms therefore avoid contingent payout structures in countries with the weakest legal protection and enforceability for investors.

Finally, the control variables show some interesting results. The results for the two models indicate that firms with significant foreign sales are less likely to use contingent payouts ($p<0.01$ in Model I), but this effect disappears once controls for international acquisition experience and the other covariates are incorporated. The fact that the parameter estimate for the industry uncertainty proxy is insignificant suggests that firms do not use contingent payouts solely to share risks arising from industry uncertainty. The insignificance of the uncertainty avoidance measure suggests that the target's willingness to bear risk as shaped by the host nation's culture does not influence the structure of international M&As. Finally, it appears that the political environments of host countries do have some bearing on the structuring of international acquisition deals. Firms are more likely to utilize contingent payouts in countries with fewer restrictions on foreign direct investment ($p<0.001$ in Model I; $p<0.01$ in Model II).

Discussion

The findings of the present study indicate that firms tend to utilize contingent payouts in high-tech and service industries. The relevance of the destination industry rather than whether or not the acquisition is diversifying suggests that

Table 3 Determinants of contingent payouts in international acquisitions

Variable	*Model I*	*Model II*
Intercept	−1.04** (0.36)	−2.70*** (0.64)
Foreign sales intensity	−1.16** (0.43)	−0.43 (0.42)
Financial leverage	−0.44** (0.15)	−0.12 (0.11)
Industry uncertainty	4.33 (3.08)	3.44 (3.39)
Investment restrictions	−1.78*** (0.46)	−1.66** (0.52)
Uncertainty avoidance	0.001 (0.005)	0.001 (0.005)
Host country growth	−11.26* (5.09)	−6.37 (5.74)
Inter-industry transaction	—	−0.16 (0.20)
High-tech industry	—	0.49* (0.21)
Service industry	—	0.41† (0.22)
Domestic acquisition experience	—	−1.78* (0.71)
International acquisition experience	—	−1.62** (0.53)
Equity acquired	—	1.17* (0.51)
Common law	—	0.45* (0.20)
χ^2	51.39***	120.99***
Log likelihood, $L(\beta_k)$	−406.14	−371.34
$-2[L(\beta_I)-L(\beta_{II})]$	—	69.60***

N=1325. Positive coefficients indicate that increases in the variable tend to increase the likelihood that the firm will use a contingent payout in the acquisition.
†$p<0.10$, *$p<0.05$, **$p<0.01$, ***$p<0.001$.

the nature of the resources acquired rather than the market relationship between the bidder and target affects the decision to structure international M&As with contingent payouts. Acquirers also turn to such methods of payment when they lack either international or domestic acquisition experience. Also consistent with the internationalization process perspective and prior entry mode research relying on information economics, the findings demonstrate that contingent payouts and the options available through partial acquisitions are substitutive in nature. Taken together, these results are consistent with the view that contingent payouts are used to transfer risk from the bidder to the target when adverse selection is problematic. Whereas previous international business research has noted that firms might turn to a joint venture as an alternative entry mode under these circumstances, the findings raise the possibility that these contractual alternatives may at least partially resolve valuation problems stemming from asymmetric information.

Substantial research in international strategy during the last two decades has focused on firms' foreign market entry modes, relating these decisions to numerous antecedents reflecting efficiency and strategic considerations. In this paper, we underscore the relevance of these entry modes' contractual heterogeneity, which has gone unexplored in research on foreign market entry and the internationalization process. Thus a need exists for researchers and managers to understand the alternative contractual arrangements underlying each entry mode rather than only consider entry modes as discrete alternatives and treat them in an aggregate fashion. Even though a firm may be engaged in an international acquisition, the commitment it makes and the risk it bears hinge upon the specific contractual structure of the deal, and the contractual structure of the acquisition may offer some of the benefits more commonly associated with other entry modes such as joint ventures.

Given the varieties of tools that firms have at their disposal for responding to the problem of adverse selection, future research on firms' international corporate development activities might adopt a more fine-grained approach that simultaneously considers alternative governance structures and contractual arrangements. For instance, based on findings presented here, it would be worth examining the conditions leading firms to use joint ventures rather than acquisitions with contingent payouts in the form of earnouts or stock-based consideration. In contrast to acquisitions, joint ventures enable the firm to experiment with the target's resources in a more focused manner, particularly in non-core domains, so their downside risk may be less substantial. Further, the sharing of equity may allow the firm to reduce the transaction costs surrounding the negotiation and enforcement of contingent claims contracts such as earnouts and rely on sequential adaptation instead (Williamson, 1991). Finally, joint ventures may enable the firm to avoid significant *ex post* transaction costs associated with combining the two firms (Hennart and Reddy, 1997).

Future comparative work could therefore not only examine *ex ante* transaction cost problems, as highlighted in this paper, but also explore the role of *ex post* transaction costs. For example, a complementary explanation for why firms use earnouts is that such contractual arrangements provide outcome-based controls that might be useful to post-merger management (Ouchi, 1979). Institution of such controls might be attractive compared with imposing the organizational systems of the acquirer on the target under a variety of circumstances, and such outcome-based controls might also be attractive in attempting to retain key managers in the target firm (Walsh, 1988; Cannella and Hambrick, 1993; Krishnan *et al.*, 1997; Kohers and Ang, 2000). However, for precisely this reason, and because the measurement of the target firm's performance is more easily carried out if it remains relatively independent of the acquirer rather than being absorbed, the use of earnouts might also prove to be an obstacle to the structural integration that is required in many acquisitions.

Future research might also examine when firms use one form of contingent contract over another. In the present study we examined earnouts and stock payments together, as the small number of earnouts precluded more disaggregated analysis, but it would be valuable to examine these deal structures separately. In an effort to explore their differences, however, we conducted two-sample *t*-tests and χ^2 tests of independence for all of the variables appearing in the models. Confirming these deal structures' many similarities, these tests indicated that all but two of the variables do not differ across the stock and earnout subsamples. However, firms that rely on stock consideration rather than earnouts tend to be more actively engaged in domestic and international acquisitions ($p<0.001$). These findings may be interpreted as being consistent with the double-lemons problem surrounding the decision to use a stock payment. Because stock payments have the shortcoming of potentially signaling to the target and the marketplace that the bidder's stock is overvalued (Eckbo *et al.*, 1990), firms with an active acquisition program have an opportunity to build a reputation for not using overvalued stock to pursue acquisition targets. Such firms can mitigate the lemon's problem of acquiring unattractive targets by using a stock payment, while also avoiding the lemon's problem of signaling to the target firm and other investors that the firm's stock is overvalued (e.g., Hansen, 1987). This interpretation is consistent with Bayless (1994) finding that the negative market reactions to equity issuances diminish for stock offerings that were preceded by other stock offerings by the firm. Samples with greater numbers of earnouts, such as those of acquisitions of US firms in high-tech domains, may be better able to explore when acquirers and targets use these structures over alternative arrangements such as partial acquisitions, joint ventures with embedded options, and so forth.

The scope and limitations of the present study present a number of additional avenues for further research. Specifically, it would be attractive to survey firms engaging in M&As to obtain more fine-grained data on the structure of contingent earnouts. Such research could examine the specific performance benchmarks used, the time duration of variable payments, and any supporting contractual provisions necessary to implement these contingent contracts. Extensions that obtain primary, firm-specific data on acquirers and target firms would also be valuable. Because our paper is ultimately silent on the performance and other organizational consequences of using contingent payouts, extensions that consider these issues would be valuable. Such research may add insights to the substantial research base on firms' foreign market entry choices by augmenting the analysis of firms' governance structure decisions with examinations of the contractual heterogeneity underlying these entry modes.

Acknowledgments

In developing this research, we received helpful comments from Jean Helwege, Mitchell Koza, Tony Tong, and two anonymous reviewers. Research assistance from Dina Tirtey is also gratefully acknowledged, as is research funding from Ohio State University's Center for International Business Education and Research (CIBER).

References

Akerlof, G.A. (1970) 'The market for 'lemons': qualitative uncertainty and the market mechanism', *Quarterly Journal of Economics* **84**: 488–500.

Amihud, Y., Lev, B. and Travlos, N.G. (1990) 'Corporate control and the choice of investment financing: the case of corporate acquisitions', *Journal of Finance* **45**: 603–616.

Anand, B.N. and Khanna, T. (2000) 'Do firms learn to create value? The case of alliances', *Strategic Management Journal* **21**: 295–316.

Anand, J. and Kogut, B. (1997) 'Technological capabilities of countries, firm rivalry and foreign direct investment', *Journal of International Business Studies* **28**: 445–465.

Balakrishnan, S. and Koza, M.P. (1993) 'Information asymmetry, adverse selection, and joint ventures', *Journal of Economic Behavior and Organization* **20**: 99–117.

Barkema, H., Shenkar, O., Vermeulen, F. and Bell, J.J. (1997) 'Working abroad, working with others: how firms learn to operate international joint ventures', *Academy of Management Journal* **40**: 426–442.

Bayless, M. (1994) 'The influence of predictability on differences in the market reaction to debt and equity issue announcements', *Journal of Financial Research* **17**: 117–131.

Brouthers, K.D. and Brouthers, L.E. (2000) 'Acquisition or greenfield startup? Institutional, cultural, and transaction cost influences', *Strategic Management Journal* **21**: 89–98.

Brouthers, K.D. and Brouthers, L.E. (2001) 'Explaining the national culture distance paradox', *Journal of International Business Studies* **32**: 177–190.

Cakici, N., Hessel, C. and Tandon, K. (1996) 'Foreign acquisitions in the United States: effect on shareholder wealth of foreign acquiring firms', *Journal of Banking and Finance* **20**: 307–329.

Cannella Jr, A.A. and Hambrick, D.C. (1993) 'Effects of executive departures on the performance of acquired firms', *Strategic Management Journal* **14**: 137–152.

Chang, S. (1998) 'Takeovers of privately held targets, methods of payment, and bidder returns', *Journal of Finance* **53**: 773–784.

Cho, K.R. and Padmanabhan, P. (1995) 'Acquisition *versus* new venture: the choice of foreign establishment mode by Japanese firms', *Journal of International Management* **1**: 255–285.

Coff, R.W. (1999 'How buyers cope with uncertainty when acquiring firms in knowledge-intensive industries: caveat emptor', *Organization Science* **10**: 144–161.

Datta, D.K. and Puia, G. (1995) 'Cross-border acquisitions: an examination of the influence of relatedness and cultural fit on shareholder value creation in US acquiring firms', *Management International Review* **35**: 327–359.

Datta, S. and Iskandar-Datta, M.E. (1995) 'Corporate partial acquisitions, total firm valuation and the effect of financing method', *Journal of Banking and Finance* **19**: 97–115.

Dewenter, K.L. (1995) 'Does the market react differently to domestic and foreign takeover announcements? Evidence from the US chemical and retail industries', *Journal of Financial Economics* **37**: 421–441.

Doukas, J. and Travlos, N.G. (1988) 'The effect of corporate multinationalism on shareholders' wealth: evidence from international acquisitions', *Journal of Finance* **43**: 1161–1175.

Dyer, J.H. and Singh, H. (1998) 'The relational view: cooperative strategy and sources of interorganizational competitive advantage', *Academy of Management Review* **23**: 660–679.

Eckbo, B.E., Giammarino, R.M. and Heinkel, R.L. (1990) 'Asymmetric information and the medium of exchange in takeovers: theory and tests', *Review of Financial Studies* **3**: 651–675.

Erramilli, M.K. (1991) 'The experience factor in foreign market entry behavior of service firms', *Journal of International Business Studies* **22**: 479–501.

Eun, C.S., Kolodny, R. and Scheraga, C. (1996) 'Cross-border acquisitions and shareholder wealth: test of the synergy and internalization hypothesis', *Journal of Banking and Finance* **20**: 1559–1582.

Fishman, M. (1989) 'Preemptive bidding and the role of the medium of exchange in acquisitions', *Journal of Finance* **44**: 41–57.

Fladmoe-Lindquist, K. and Jacque, L.L. (1995) 'Control modes in international service operations: the propensity to franchise', *Management Science* **41**: 1238–1249.

Gatignon, H. and Anderson, E. (1988) 'The multinational corporation degree of control over subsidiaries: an empirical test of a transaction cost explanation', *Journal of Law, Economics, and Organization* **4**: 305–336.

Gordon, G.G. (1991) 'Industry determinants of organizational culture', *Academy of Management Review* **16**: 396–415.

Haleblian, J. and Finkelstein, S. (1999) 'The influence of organization acquisition experience on acquisition performance: a behavioral learning theory perspective', *Administrative Science Quarterly* **44**: 29–56.

Hansen, R.G. (1987) 'A theory for the choice of exchange medium in mergers and acquisitions', *Journal of Business* **60**: 75–95.

Harris, R.S. and Ravenscraft, D. (1991) 'The role of acquisitions in foreign direct investment: evidence from the US stock market', *Journal of Finance* **46**: 825–844.

Hennart, J.-F. and Reddy, S. (1997) 'The choice between mergers/acquisitions and joint ventures: the case of Japanese investors in the United States', *Strategic Management Journal* **18**: 1–12.

Hofstede, G. (1980) *Culture's Consequences: International Differences in Work-related Values*, Sage: Beverly Hills, CA.

Johanson, J. and Vahlne, J.E. (1977) 'The internationalization process of a firm: a model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies* **9**: 22–32.

Keats, B.W. and Hitt, M.A. (1988) 'A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance', *Academy of Management Journal* **31**: 570–598.

Kogut, B. (1991) 'Joint ventures and the option to acquire', *Management Science* **37**: 19–33.

Kogut, B. and Singh, H. (1988) 'The effect of national culture on the choice of entry mode', *Journal of International Business Studies* **19**: 411–432.

Kogut, B. and Zander, U. (1992) 'Knowledge of the firm, combinative capabilities, and the replication of technology', *Organization Science* **3**: 383–397.

Kohers, N. and Ang, J. (2000) 'Earnouts in mergers: agreeing to disagree and agreeing to stay', *Journal of Business* **73**: 445–476.

Krishnan, H.A., Miller, A. and Judge, W.Q. (1997) 'Diversification and top management team complementarity: is performance improved by merging similar or dissimilar teams?', *Strategic Management Journal* **18**: 361–374.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (1997) 'Legal determinants of external finance', *Journal of Finance* **52**: 1131–1150.

Lee, T.-J. and Caves, R.E. (1998) 'Uncertain outcomes of foreign investment: determinants of the dispersion of profits after large acquisitions', *Journal of International Business Studies* **29**: 563–579.

Markides, C.C. and Ittner, C.D. (1994) 'Shareholder benefits from corporate international diversification: evidence from US international acquisitions', *Journal of International Business Studies* **25**: 343–366.

Martin, K.J. (1996) 'The method of payment in corporate acquisitions, investment opportunities, and management ownership', *Journal of Finance* **51**: 1227–1246.

Mayer, W. and Walker, M. (1996) 'An empirical analysis of the choice of payment method in corporate acquisitions during 1980 to 1990', *Quarterly Journal of Business and Economics* **35**: 48–65.
Morck, R. and Yeung, B. (1992) 'Internalization: an event study test', *Journal of International Economics* **33**: 41–56.
Morosini, P., Shane, S. and Singh, H. (1998) 'National cultural distance and cross-border acquisition performance', *Journal of International Business Studies* **29**: 137–158.
Ouchi, W.G. (1979) 'A conceptual framework for the design of organizational control mechanisms', *Management Science* **25**: 833–848.
Pennings, J.M., Barkema, H. and Douma, S. (1994) 'Organization learning and diversification', *Academy of Management Journal* **37**: 608–640.
Reuer, J.J. and Koza, M.P. (2000) 'Asymmetric information and joint venture performance: theory and evidence for domestic and international joint ventures', *Strategic Management Journal* **21**: 81–88.
Seth, A., Song, K.P. and Pettit, R. (2000) 'Synergy, managerialism or hubris? An empirical examination of motives for foreign acquisitions of US firms', *Journal of International Business Studies* **31**: 387–405.
Seth, A., Song, K.P. and Pettit, R. (2002) 'Value creation and destruction in cross-border acquisitions: an empirical analysis of foreign acquisitions of US firms', *Strategic Management Journal* **23**: 921–940.
Shaked, I., Michel, A. and McClain, D. (1991) 'The foreign acquirer bonanza: myth or reality?', *Journal of Business Finance and Accounting* **18**: 431–447.
Shenkar, O. (2001) 'Cultural distance revisited: towards a more rigorous conceptualization and measurement of cultural differences', *Journal of International Business Studies* **32**: 519–536.
Sherman, S.J. and Janatka, D.A. (1992) 'Engineering earn-outs to get deals done and prevent discord', *Mergers and Acquisitions* 26–31.
Simonin, B.L. (1997) 'The importance of collaborative know-how: an empirical test of the learning organization', *Academy of Management Journal* **40**: 1150–1174.
Spence, A.M. (1974) *Market Signaling: Informational Transfer in Hiring and Related Screening Processes*, Harvard University Press: Cambridge, MA.
Stulz, R.M. (1988) 'Managerial control of voting rights: financing policies and the market for corporate control', *Journal of Financial Economics* **20**: 25–54.
Travlos, N. (1987) 'Corporate takeover bids, methods of payment, and bidding firm's stock returns', *Journal of Finance* **42**: 943–964.
UNCTAD (2000) *World Investment Report*, Geneva, Switzerland.
Vermeulen, F. and Barkema, H. (2001) 'Learning through acquisitions', *Academy of Management Journal* **44**: 457–476.
Walkling, R.A. and Long, M.S. (1984) 'Agency theory, managerial welfare, and takeover bid resistance', *Rand Journal of Economics* **15**: 54–68.
Walsh, J.P. (1988) 'Top management turnover following mergers and acquisitions', *Strategic Management Journal* **9**: 173–183.
Williamson, O.E. (1991) 'Comparative economic organization: the analysis of discrete structural alternatives', *Administrative Science Quarterly* **36**: 269–296.
Zaheer, S. (1995) 'Overcoming the liability of foreignness', *Academy of Management Journal* **38**: 341–363.
Zahra, S.A., Ireland, R.D. and Hitt, M.A. (2000) International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal* **43**: 925–950.
Zollo, M. (1998) 'Knowledge codification, process routinization, and the creation of organizational capabilities', Unpublished dissertation, University of Pennsylvania.

Accepted by Arie Lewin, Editor in Chief, 22 August 2003.