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DETERMINANTS OF ACQUISITION COMPLETION: A RELATIONAL PERSPECTIVE

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DETERMINANTS OF ACQUISITION COMPLETION: A RELATIONAL PERSPECTIVE

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ABSTRACT

The strategic literature on relatedness in the context of mergers and acquisitions (M&As) is extensive, yet we know little about whether or how relatedness has an influence on the announcement to completion stage of the M&A process. Drawing on research on intra-industry competition and relational capabilities, we seek to shed light on the relatedness debate by examining the strategic forces that affect the completion of an announced *related* M&A, accounting for financial and organizational factors. We also explore additional strategic forces that might amplify or attenuate the negative effect of relatedness on deal completion. We test and find support for our hypotheses using longitudinal data from a sample of the largest M&A announcements in the world from 1991 to 2001.

INTRODUCTION

A critical debate in the strategic management literature is whether related mergers and acquisitions (M&As) generate greater synergies than unrelated M&As do (Capron and Hulland, 1999; Capron, Mitchell, and Swaminathan, 2001), and thus ultimately lead to more successful deals (Chandler, 1962; Krug, 2008; Rumelt, 1974; Seth, 1990). This debate has spurred a wealth of theoretical and empirical research. Nevertheless, there is little research analyzing how industry relatedness affects an important but little understood M&A outcome, namely the likelihood of completing or withdrawing from an announced M&A. We seek to contribute to this conceptual and empirical debate by examining the nature, causes, and consequences of industry relatedness with respect to the likelihood of completing an announced acquisition. We do so by focusing on the dyadic relationship between the acquirer and target firms, and in particular on the strategic forces that might prevent an announced M&A from completing.

Given the significant visibility of M&A announcements, and the pressures for firms to downplay negative aspects of deals, the rhetoric of M&A announcements is typically optimistic and vague. Companies seldom trumpet specific reasons for considering a merger. Instead, they paint a positive yet often blurred picture of future synergies—while downplaying or omitting references to uncertainty surrounding the deal—in order to increase the momentum moving the deal forward. This rhetoric suggests that all announced M&As should complete. However, even though many engagements end up as alleged *marriages made in heaven*, a non-trivial percentage of firms walk away from proposed deals—with over a fifth of the top 100 worldwide M&A announcements in the 1990s failing to consummate (SDC, 2002).

Research seeking to understand why firms complete or withdraw from announced M&As focuses chiefly on financial aspects of the deal—such as the existence of competing bids, the

method of payment form, and target firms' financial distress—but we know very little about the strategic decisions taking place in the interim period between the public announcement of an M&A and its completion or withdrawal. This has important financial and strategic consequences—as well as key social and psychological ramifications—indicating that the M&A process is not as neatly analytical and segmented as described. As Haspeslagh and Jemison, (1991: 41-42) point out, the M&A process "involves the perception of an opportunity by a champion, its evaluation by many actors, and the building or withholding of a commitment to it."

In effect, even though M&A announcements come down to a simple dichotomous decision to take-it-or-leave it, this joint decision can be complex. In particular, not only are there many unknowns surrounding whether the proposed M&A will be completed or withdrawn, but also there are demands on potential partners to learn about each other, examine their potential sources of conflict, develop a strategy to communicate and work through issues, and ultimately negotiate a contractual arrangement acceptable to both firms. In short, this complex inter-firm relationship requires target and acquirer firms to overcome the inevitable dyadic *friction* that is part of the M&A negotiation process.

A drawback in research on M&As is that most studies adopt a focal-firm approach to the merger process, often taking the unilateral perspective of the acquiring firm as opposed to assessing the dyadic factors that become particularly salient during the negotiation stage. More recently, strategy scholars have begun to focus on understanding the target firm's point of view in the merger process (Graebner and Eisenhardt, 2004; Graebner, 2004; Coff, 2002). For example, Graebner and Eisenhardt (2004) put forth a courtship view arguing that sellers can be influential and active participants in the M&A decision-making process, and demonstrate that some degree of target firm cooperation is necessary in order to reach deal completion. This

research has increased our understanding of the M&A process, and highlights the value of studying more systematically the relationship between acquirer and target firms. That is, the decision to move forward or walk away from an announced M&A is rarely, if ever, a unilateral decision. Hence, it is important to examine relational factors, such as accumulated rivalry sentiment between the two firms, in the M&A decision making process.

We argue that the willingness and ability of firms to partner will influence whether an announced M&A is completed or withdrawn. In particular, we maintain that relatedness between acquirer and target firms tends to hinder M&A completion as intra-industry competition generates greater friction in the relationship between target and acquirer firms than is the case for more cooperative inter-industry announced M&As. Furthermore, we claim that two strategic conditions either magnify or attenuate the relatedness effects. First, we argue that the life cycle of the related industries in which acquirer and target related firms are embedded plays a critical moderating role in the link between industrial relatedness and deal completion likelihood. In particular, the industry life cycle either provides a strategic motivation to complete the announced deal (in the case of declining industries) or exacerbates the friction stemming from the intra-industry competition (in growing and rapidly changing industries). Second, we argue that existing inter-firm capabilities (Lorenzoni and Lipparini, 1999) between the acquirer and target firms prior to the M&A announcement will alleviate some of the negative effects of industry relatedness on deal completion. In the remainder of the article, we theoretically develop and empirically analyze these arguments.

M&A ANNOUNCEMENT TO COMPLETION STAGE

The M&A process involves three main stages: the pre-announcement period; the announcement

to completion or withdrawal phase; and the post-merger integration period. In the preannouncement stage, acquirer firms screen public information of potential target firms, conduct financial valuations, identify possible economic synergies, and decide upon an offer price. In the second due diligence or courtship stage, the acquirer and target firms engage in negotiations. In the third stage, the legal consummation of the M&A occurs, followed by the integration of the two companies.

We focus our conceptual and empirical analysis on the second M&A stage, which begins with a public legal announcement of the acquisition intention through a letter of intent where the acquirer publicly discloses the price offered and the target firm has the fiduciary responsibility to consider all legitimate offers. Divergent strategic forces increase or decrease friction between the two firms in the announced M&A, and thus influence rates of completion or withdrawal. We do not claim that walking away from an announced deal equates to failure, as breaking up the engagement might turn out to be a lot better than a bad marriage and/or a subsequent divorce. In particular, we make no claims that completing an announced M&A or walking away from it will result in positive or negative M&A outcomes, only that either decision is profoundly consequential to both firms. For example, some M&As probably should not have been consummated, such as the merger between Daimler and Chrysler, whereas other announced deals that were withdrawn, such as Comcast's failed attempt to acquire Disney, arguably should have moved forward.

A key feature of the second M&A stage is that there are strong competing pressures to complete or withdraw from an announced M&A that generate substantial deal strain in this stage.¹ For acquirer firms, there is strong inertia toward M&A completion due to the escalating

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¹ At the time of an M&A announcement, there are mixed findings about relatedness and announcement shareholder reactions. Thus, governance efficiency and strategic fit have been shown to lead to higher stockholder returns from

commitment and increasing momentum as the merging parties become more involved (Puranam, Powel, and Singh, 2006; Schweiger, 2002), and due to fears among acquiring managers that they will be perceived as indecisive if they walk away from a deal (Haspeslagh and Jemison, 1991). In addition, investment banks have incentives to push for M&A completion, not only to preserve their matchmaking reputation but also to obtain banking fees (Hunter and Jagtiani, 2003). Stock market pressures also play a key role as M&A withdrawals can be highly disruptive financially, at least in the short term—e.g., when announced takeovers are abandoned, returns are often negative (Bradley, Desai, and Kim, 1983) for bidders (Holl and Pickering, 1988) and for target firms (Fabozzi, Feeri, Fabozzi, and Tucker, 1988). Moreover, withdrawals might turn bad bidders into good targets as well (Mitchell and Lehn, 1990) and provide significant positive returns for target industry rivals (Akhigbe, Borde, and Whyte, 2000). Finally, many firms include substantial termination fees in their letter of acquisition intent that help to ensure target firms that M&A announcements are credible (Bates and Lemmon, 2003).

There are also multiple reasons compelling acquirer and target firms to walk away from an announced deal, such as the existence of competing bids. Regulatory hurdles related to antitrust issues may also lead to deal withdrawal (Clougherty, 2005), particularly as this process does not start until the deal is announced. In the United States, the Department of Justice and the Federal Trade Commission share the responsibility of enforcing antitrust laws. In other countries, there are equivalent agencies fulfilling similar tasks such as the European Commission in the European Union region (Bergman, Jakobsson, and Razo, 2005). In addition, the two firms involved in an announced M&A might conclude that they are unable to develop trustworthiness,

purely related announced acquisitions than from unrelated ones (Flanagan, 1996), yet other studies find opposite effects (Chatterjee, 1986).

² The breadth of antitrust decisions expands beyond national boundaries as the European Commission demonstrated by blocking the proposed \$42 billion merger between two large U.S. firms, GE and Honeywell, in summer 2001.

cooperate as partners and/or work towards common goals. For example, two competitors within an industry may find it difficult to switch from being rivals to being involved in a cooperative relationship.

THEORY

Our underlying logic is that all things being equal, the greater is the *friction* between the acquirer and the target firms—defined as the forces limiting the willingness or ability of firms to partner—the less likely that an announced M&A will complete once it is announced. We assess this argument in the context of industry relational dynamics that possess their own strategic logic in influencing organizational action in a variety of ways. Industries can be viewed as spheres of activity within which actors "are bounded by the presence of shared cultural-cognitive or normative frameworks or a common regulatory system so as to constitute a recognized area of institutional life" (Scott, 2001:84), as evident in the publishing (Thornton, 2002), broadcasting (Leblebici, et al., 1991), and health care (D'Aunno, Succi, and Alexander, 2000) sectors.

Despite these commonalities, firms establish cooperative and competitive relationships within and across industries (Lant and Baum, 1995; Porac et al., 1995; Chen, 1996; Baum and Korn, 1996). This dual outcome is important in the context of announced M&As because firms in overlapping business are more likely to engage in a competitive inter-organizational relationship (Hannan and Freeman, 1977). Thus, related M&As will tend to provoke stronger strategic friction among the acquirer and target firms than unrelated M&As will.

Industry Relatedness

M&As involve either expanding within the same industry (related acquisition) to seek economies

of scale and scope by exploiting synergic economies, or diversifying into new industries (unrelated acquisition) to exploit financial economies (Hitt et al., 2001). Firms within the same industry share a common understanding of how business is conducted. Due to this shared understanding, the inter-organizational information asymmetry problem is generally minimized in related M&As. Yet at the same time, we know that similarity between firms within an industry makes them more fierce (informed) competitors (Baum and Mezias, 1992). Thus, we argue that friction during the M&A due diligence stage will be higher between negotiating firms when they are former industry rivals. In particular, we maintain that related announced M&As will be less likely to consummate than unrelated ones for two main competitive-based rationales.

First, negotiating interactions, in part driven by organizational cultures, are likely to collide when the announced M&A involves two former competitors in the same industry (Bergh, 1997; Buono and Bowditch, 1989; Chatterjee, Harrison, and Bergh, 2003), thereby increasing friction and negatively influencing completion likelihood. Competition is stronger and more personal within, rather than across, industrial sectors, with sources of friction extending to enduring differences of opinion about the usefulness of an organization's resources and practices (Baum and Mezias, 1992). In other words, informal dyadic relationships in related M&As exacerbate tensions between acquirer and target firms.

Second, the strategy literature argues that firms in related acquisition are less subjective to information asymmetries. Thus, they are more likely to identify and develop joint opportunities (Brush, 1996). We claim that a parallel strategic dynamic occurs during the courtship period following an M&A announcement in a way that reduces the inter-firm resource combination potential. That is, following an M&A announcement, decision makers will seek to assess the ability of firms to share and integrate organizational resources and capabilities. These

negotiations will involve a fair amount of friction given the high knowledge requirements. For example, the information processing requirements—interdivisional coordination, resource sharing, and need for financial control—are likely to be higher for related than for unrelated acquisitions (Hill and Hoskisson, 1987). As a result, unrelated diversification requires less industry institutional amalgamation, thus entailing lower potential friction and ultimately allowing for better social exchanges and higher likelihood of M&A completion.

These relational arguments grounded around strategic friction are consistent with other accounts of managerial behavior, suggesting that managers are keen on pursuing unrelated acquisitions because such M&As reduce uncertainty for the combined entity (Park, 2003), diversify managers' employment risk (Amihud and Lev, 1981), and enhance their compensation by increasing firm size (Kroll, Simmons, and Wright, 1990). In light of these arguments, we propose:

Hypothesis 1. The likelihood that an announced M&A will be completed will be lower for related than unrelated M&As.

Industry Life Cycle

The industry relatedness hypothesis suggests that cooperative inter-organizational relationships will generate greater dyadic alignment than will competitive relationships, due in part to the minimization of strategic friction and ultimately to the anticipation of mutual gain (Galaskiewicz, 1995; Oliver, 1990). Yet, this prediction may not always hold because firms might engage in both cooperative and competitive relationships within industries (Baum and Korn, 1996; Chen, 1996; Lant and Baum, 1995; Porac, Thomas, Wilson, Paton, and Kanfer, 1995). Thus, it is important to establish when competition is more likely than cooperation among target and acquirer firms in the same industry.

A key factor influencing competition and cooperation in an M&A is the life cycle of a given industry—that is, whether the industry is growing, mature or declining (Robinson and McDougall, 1998; Stimpert and Duhaime, 1997). In particular, M&A announcements in declining industries create a situation where target and acquirer firms might have shared incentives to complete the deal, whereas announcements in growing industries enhance effects of competition among partners. Thus, growing related industries will be more likely to experience friction in the courtship period that minimizes potential resource complementarities (Dussage, Garrette, and Mitchell, 2000), and thereby ultimate limits the likelihood of M&A completion.

M&As in declining and mature industries are strategically justified on the basis that they allow merging firms to close low value-adding facilities, lay off poor performing managers, and rationalize administrative processes (Bower, 2001). Industry consolidation pressures also prevail on this process, as firms seek to maintain competitive advantage in response to competitors' actions (Barnett and McKendrick, 2004). For example, in the automotive sector, the Daimler-Chrysler M&A was followed by Ford's purchase of Jaguar, and by GM's foray into Asian markets. M&As in declining and mature industries thus provide acquirer firms with the chance to increase profitability and remain viable players in the industry (Anand and Singh, 1997). Hence, although target firms in declining industries might have some incentives to resist announced M&As—such as a distrust of merging with former rivals—these concerns are likely outweighed not only by decision-makers' fear of future bankruptcy, but also by uncertainties about which other firms might seek to acquire them if the current announced M&A were to be withdrawn.

By contrast, announced M&As in growing industry sectors will encounter greater relational friction primarily because target firms in growing industries will be more hesitant to

accept an announced M&A. That is, although firms in growing industries are good acquisition targets for acquirers looking to expand or increase market share, it is unlikely that firms in this growing industry would be motivated to engage in an M&A where they would become the junior partner in the M&A relationship. Therefore, we expect that partner friction in this period will be higher in related and growing industries than in related and declining industries, and predict the following.

Hypothesis 2. The likelihood of completing an announced M&A between firms in related industries will be moderated by the industry life cycle, with acquirer and target firms in growing and related industries experiencing lower completion rates than firms in declining and related industries.

Relational Capabilities

Inter-organizational relationships between the acquirer and target firm prior to the deal announcement offer critical resource combinations (Lorenzoni and Lipparini, 1999). This partner-specific absorptive capacity—the ability to "design inter-firm routines that facilitate information sharing and increase socio-technical interactions" (Dyer and Singh, 1998)—provides firms with important advantages that firms without such experience do not have. In particular, relational capabilities formed during prior inter-organizational exchanges are likely to reduce sources of potential strategic friction during due diligence M&A stage.

Prior inter-organizational relationships can take a number of organizational forms, with the majority falling under the umbrella of alliances. Alliances offer an incremental option towards further involvement (Chi, 2000; Kogut, 1991)—also referred to as encroachment strategy (Haspeslagh and Jemison, 1991: 247). Alliances can be an instrument for partner firms

to assess each other (particularly in terms of intangible assets such as brands and distribution networks), understand through direct involvement how the business operates, develop patterns for efficient resource-exchange (experiential capital), and investigate potential takeover opportunities by first approaching and knowing a partner before acquisition. For example, firms in alliances develop relational skills (Ariño and De la Torre, 1998; Kale, Singh, and Perlmutter, 2000) and learn from each other (Anand and Khanna, 2000: Hayward, 2002). In this sense, prior alliance experience grants target and acquirer firms engaging in due diligence negotiations with potentially important and not readily available skills and capabilities regarding their compatibility across multiple dimensions. These capabilities include relationship styles, ways of resolving conflict, routines to communicate more effectively, and strategies to engage with each other in order to enhance cooperation.

Evidence shows that learning from alliances and shifting these inter-organizational relationships into acquisitions is not atypical. Nanda and Williamson (1995: 122) illustrate the case of several well-known restructurings such as Philips-Whirlpool, demonstrating that joint venture collaborations were a preliminary step to "maintain continuity and commitment as ownership is transferred from one company to the other." In addition, Kogut (1989) studies nearly 150 joint ventures involving US firms to show that 25 percent of them eventually turned into acquisitions, and Porrini (2004) finds that a previous alliance between an acquirer and a target correlates positively with acquisition performance. Yet, none of these former studies explore how previous opportunities for firms in the same industry to learn how to handle friction that occurs in inter-firm relationships. Nor do these studies show how firms develop routines and strategies to attenuate friction during the due diligence stage of related M&As.

We argue that when the acquirer and target firms have been involved in an interorganizational cooperative relationship such as an alliance, they will be more likely to complete an announced M&A because they have had an opportunity to develop and test their relational capabilities. Thus, they are more able to minimize friction during their courting relationship (relative to other announcements that did not entail a previous alliance), as they are experienced negotiators. The same logic suggests that since these two firms have a prior relationship, they are less likely to shift from this existing relationship to a new governance relationship, and hence announce an M&A if they do not think they can consummate it. Our prediction is consistent with Wang and Zajac's (2007)'s argument that partner-specific knowledge of two firms in an alliance transfers to post-acquisition skills because they "may develop rich firsthand information about each other." It is also consistent with real options research (Chi, 2000; Folta and Miller, 2002) claiming that "alliances can be a way for firms to reduce the risk of evaluating the potential target and can serve as a stepping stone for later acquisition" (Wand and Zajac, 2007: 1314) We suggest that the inter-relational experience and mutual learning—as well as the relational skills and strategies developed between the acquirer and the target firms in the same industry during their alliance relationship—will surface during the M&A courtship period, and propose:

Hypothesis 3. The likelihood of completing an announced M&A between firms in related industries will be moderated by their relational capabilities; that is, when the acquirer and target firms in related industries have been involved in an alliance relationship prior to the M&A announcement, they are more likely to complete an announced M&A.

METHOD

Sample and Data

Our study focuses on announced M&As in the 1990s, a period coinciding with the fifth merger wave which occurred in the 1900s (Fligstein, 1990; Palmer, Barber, Zhou, & Soysal, 1995; Stearns & Allan, 1996). This merger wave started following the 1992 recession, reaching its peak in 1999-2000. It occurred in a climate of globalization, rapid technological change, rising stock prices, regional market integration, and increased industry deregulation. During this period, M&A activity was an order of magnitude greater than in previous waves.³

We collected data on the 100 largest announced M&As worldwide ranked by deal value in each year from 1991 to 2001, for a total of 1100 announced M&As. This data includes domestic (i.e., involving two firms from the same country) and cross-border M&A announcements. Information on these M&As was obtained from the SDC PlatinumTM Worldwide Merger, Acquisitions & Alliances database. The SDC database contains detailed information on public and private worldwide M&A announcements, including acquirer and target firm profiles. A unique advantage of the SDC is that it systematically provides otherwise scarce data on worldwide M&As, which it collects from over 200 English and foreign language news resources, SEC filings and their international counterparts, trade publications, wires, as well as proprietary sources of investment banks, law firms, and other advisors. We also used a variety of sources to collect supplemental information for a number of our variables.

We selected the M&A announcements on the value of the M&A. SDC defines the total

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³ For instance, at the peak of the 1980s merger wave in 1988, 2,258 M&A announcements with a total value offered of US \$246 billion occurred, while in 1999 the numbers escalated to 9,278 M&A announcements with a total value offered of US \$1,425.9 billion (Mergerstat Review, 2002). In addition, M&A activity in the 1990s has been increasingly global in scope. For example, the number and value of foreign acquisitions of U.S. companies increased from 167 to 1,248 deals and US \$9.3 billion to \$300 billion respectively from 1992 to 2000 (Mergerstat Review, 2001). In particular, Western European firms became very active bidders, undertaking some of the largest deals in this wave—e.g. Vodafone Airtouch's acquisition of Mannesmann.

value of the M&A as the consideration offered by the acquirer, including, but not limited to, the amount paid for stock, debt, and assets, but excluding fees and expenses. This measure reflects the value, in millions of US dollars, of the target firm. We took a conservative approach to the M&A definition by considering only those M&As that involve a complete (i.e., 100 percent) merging of two separate entities, thereby eliminating potential complexities influencing M&A completion, such as those involving different percentages of acquired ownership stakes. The average value of an announced M&A for the entire sample that we selected was 6.4 billion U.S. dollars. There was variation over time in the mean value of the announced M&As, ranging from a low of 758 million in 1991 to a high of 19.8 billion in 1999. On average, the acquirer firm was twice as large as the target firm.

In order to ensure that our findings were robust to decisions of court systems, we excluded all observations wherein anti-trust decisions by courts and regulatory agencies as reported by the SDC dataset influenced deal outcomes. We believe that the removal of these M&A cases eliminates any remaining potential noise not controlled for by the legal variables in our models. Nevertheless, results were robust to the inclusion or exclusion of these cases.

Variables

Dependent Variable

We measure the likelihood of completing an announced M&A by creating a dichotomous variable that was coded 1 if an announced M&A was completed, and 0 otherwise (i.e., withdrawn). This measure was created from information included in the SDC database. Roughly 20 percent of announced M&As in our sample were withdrawn, and all observations in our sample fall into one of the two categories (i.e., there are no pending announced M&As).

Independent Variables

To predict the likelihood that announced M&As are completed, we consider three industry level measures: relatedness, industry life cycle, and relational capabilities. The life cycle variable is a refined measure of relatedness, as it separates related M&As into two categories—growing related industries, and consolidating related industries (i.e., declining and mature related industries). We examine the interaction between these measures and the relational capability measure.

Industry Relatedness. We consider whether acquirer and target firms are in the same industry (relatedness), coded 1 if the primary four-digit Standard Industry Classification (SIC) code of the acquirer coincides with either the primary or secondary four-digit SIC codes of the target firm, and 0 otherwise. The SIC code is widely used to operationalize industry relatedness in studies of acquisitions (cf. Markides & Ittner, 1994). We argue that when the acquirer and target are in a related industry, friction is more likely than when the acquirer and target are in unrelated industries. As a result, we predict that industry relatedness will have a negative effect on deal completion.

Fifty-six percent of the announced M&As in our sample are horizontal acquisitions (Capron, 1999; Capron & Pistre, 2002)—that is occurring within the same 4-digit SIC category. In addition, M&A announcements in our sample are most prominent in the financial, manufacturing and services sectors.

Industry Life Cycle. We grouped acquirer and target firms that are in the same (related) industry into life-cycle categories. The life-cycle measures capture the growth of an industry (measured at the four-digit SIC level) in a given year in terms of sales by establishments within the scope of the U.S. Economic Census data. Three life-cycles are often specified in the

empirical literature: declining, mature, and growing (cf. Miles, Snow, & Sharfman, 1993; Robinson & McDougall, 1998).

Following convention, we define growing industries as those that increase at a ten percent or greater rate per year, based on the average annual sales increases over the 11 year period (in constant 1991 dollars) (Miles, Snow, & Sharfman, 1993). We group declining and mature industries into one category to measure consolidation in related industries. Declining industries experience negative growth, such as the defense industry. Mature industries grow between one and ten percent per year, such as the petroleum industry. In the analyses, the omitted reference category is unrelated industries. In other words, our industry life cycle measure replaces the related industry category with two dummy measures: growing industries, and declining/mature industries. Results were robust to the creation of time-varying life cycle measures (e.g., when we updates our measures in each year of our analysis), and when we separated the three life cycle categories into more refined groups (cf. Robinson & McDougall, 1998).

Relational Capabilities. We measure whether the acquirer and target firms were previously involved in an alliance relationship using the SDC PlatinumTM Joint Ventures and Alliances database. Following Wang and Zajac (2007), we assess inter-organizational experience over a five year window. We coded this measure one if the acquirer and target firms had been involved in a joint venture or alliance at any time during the five years prior to announcing an M&A, and zero otherwise.

Control Variables

We include a number of variables related to the acquirer, the target firm, and the acquirer-target dyad at the organization, industry, and country levels of analysis. In terms of the acquirer, we

measure strategic capability in terms of *industry diversification* using the acquiring firm's product count scores (four-digit SIC level) (Montgomery, 1982). We measure the acquirer's *prior experience in M&As* as a dichotomous outcome of whether the acquirer completed an announced M&A within the past two years. We coded this dichotomous measure 1 if the acquirer completed an M&A at any time during the 730 days prior to the current M&A announcement, and 0 otherwise. Main results held when we split the experience measure into domestic and cross-border experience. In addition, we control for whether the acquirer was a *public* company (coded 1), as opposed to a private company (coded 0) (Capron and Shen, 2007).

In terms of the target firm, we measure the *deal attitude* of the target firm's board of directors to the announced M&A (Schneper & Guillén, 2004), coded 1 if it is hostile and 0 otherwise (i.e., friendly or neutral). We also control for whether the target firm was *bankrupt* at the time of announcement (Weston, et al., 2001). In addition, we include a measure of the target firm's *country risk* that is based on an index of economic freedom available from the Heritage Foundation/Wall Street Journal. This variable accounts for ten broad political and regulatory factors that influence risk in investment in a given country: trade policy, fiscal burden of the government, government intervention in the economy, monetary policy, capital flows and foreign investment, banking and finance, wages and prices, property rights, regulation, and black market. Based on these factors, researchers generated scores for countries ranging on a scale from 1 to 5, with the lower score, the lower the country's institutional risk.

In terms of the dyad, we control for the *size difference* between the merging firms based on a measure from SDC of whether the announced M&A was categorized as a "merger of equals." The SDC considered a merger of equals to involve similar market capitalization between the two firms, a roughly 50/50 ownership split, and close to equal representation

between the two firms on the board of directors of the newly formed entity. This variable was coded 1 if the firms announced that their merger was considered to be equal, and 0 otherwise. We also control for the existence of a *competing bidder*. Following Capron and Shen (2007), we use a binary measure reported by SDC that is coded 1 if there is at least one other bidder for the target firm, and 0 otherwise.

We measure *national cultural distance* in the dyad following the scheme used by Morosini, Shane and Singh (1998), which is based on research by Kogut and Singh (1988). This multi-dimensional cultural difference measure estimates the distance between a specific country and other countries based on Hofstede's (1980) four cultural dimensions: power distance, masculinity-femininity, uncertainty avoidance, and individualism-collectivism. The Hofstede measure has been criticized for being somewhat outdated (Shenkar, 2001), yet it remains the measure of choice in studies measuring cultural values at work across countries (cf. Brouthers & Brouthers, 2001), and in M&A studies (Stahl and Voigt, 2008). It is often preferred to other measures of culture based on general population values (e.g., World Values Survey). We also include a variable that measures language difference between the target and acquirer firm countries, a control common in studies of cultural differences (O'Grady & Lane, 1996), which was coded 1 if the two firms were in countries that spoke a different language, and 0 if they spoke the same language. In addition, we rely on Reynolds and Flores' (1989) categorization of civil and common law legal families to identify regulatory environments at the country level, with this variable coded 1 if the acquirer and target firms' countries had the same legal system (common or civil), and 0 otherwise.

Financial measures. We control for the size of the deal, and the method of payment (Weston et al., 2001). The size of the announced deal is measured in terms of the log of the

M&A value (i.e., price offered for the target firm). Research on returns to bidders of M&As often focuses on whether cash, stock, or a combination of methods is used to pay for a deal, with target firms preferring cash (Fuller, Netter, & Stegemoller, 2002). We created three dummy variables to capture these three payment methods, and include the cash and stock forms in our models (the dummy for combination payment is the reference category). We were unable to control for deal premium due to missing data.⁴ Our main results were robust to the inclusion of a measure of the difference between the closing price and the initial offer. In addition, we control for changes over time in the *target country's currency exchange rates* (Oetzel, Bettis, & Zenne, 2001; IMF, 2001). For each target country/year, we collected information on the *exchange rate* per SDR (Special Drawing Rights)—a weighted measure based on a basket of currencies—and divided the exchange rate of the target country currency per SDR in a given year by the exchange rate per SDR for that country in the prior year.

Temporal measures. We control the duration from announcement of an M&A until its completion/withdrawal (and its squared term), and for the year of the announcement. The duration control is a measure of the number of days from announcement of an M&A until completion or withdrawal. Effects relating to the year of the M&A (1991-2001) are examined using a set of dummy variables, with 1991 being the omitted reference category in the regression analyses.

Models and estimation methods

To analyze the likelihood that an announced M&A was completed, we use logistic regression (Long, 1997) to regress the dichotomous completion/withdrawal variable on \mathbf{x}_{i} , a vector of

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⁴ Although several options are available from SDC (e.g., premium calculated one week), information is missing for roughly 35 percent of our observations (primarily private firms). Thus, we reserve this measure for robustness tests.

explanatory variables, with ß being a vector of parameter estimates, as indicated in Equation 1 below:

Logit: Pr (Completion_j = 1 |
$$\mathbf{x}_j$$
) = exp($\mathbf{x}_j \beta$) / (1 + exp($\mathbf{x}_j \beta$)) (1)

Our models provide robust (Huber/White) standard errors, clustered by the 854 acquiring firms in our sample. In particular, we adjusted standard errors for intra-group correlation among acquirers using the STATA cluster command. Results were robust in models where we cluster by the (four-digit) industry.

RESULTS

Table 1 provides descriptive statistics for the variables in our analyses, and Table 2 provides the correlation matrix for these variables. In addition to the information reported in these Tables, we note that twenty-one percent of M&As in our sample were cross-border, a rate that generally increased in increasing year, with roughly thirty percent of announced M&As in 2001 occurring between firms in different countries. Not surprisingly, most of the largest announced M&As occur within and across industrialized countries, particularly in North America and Europe. For example, sixty-four percent of acquirer firms and sixty-none percent of target firms were from North America, and twenty-nine percent of acquirer firms and twenty-five percent of target firms being from Western Europe.

Insert Tables 1 and 2 about here

Table 3 presents the findings from our analysis of the likelihood of completing an announced M&A. Model 1 provides results related to the control measures. It shows that many financial measures had a significant effect on deal completion likelihood, consistent with prior research (cf. Weston et al, 2003). However, it also shows that strategic factors at organizational, industry and country levels—such as acquirer industry diversification—had non-trivial effects on completion rates. Moreover, these factors held not only for acquirer firms, but also for the target firm (e.g., target country risk) and the dyad (e.g., merger of equals).

Model 2 of Table 3 shows that, consistent with Hypothesis 1, announced M&As in related industries are 55% less likely to complete than announced M&As in unrelated industries [1/(exp(-.44)=1.55]. In other words, the greater is the friction between target and acquirer, the less likely are they to complete their announced M&A.

Insert Table 3 about here

Model 3 of Table 3 introduces our measures of industry life cycle, wherein announced M&As in related industries are broken into growing and consolidating related industries. Consistent with Hypothesis 2, we find that announced M&As in related growing industries are 53% less likely to complete than announced M&As in unrelated industries [1/(exp(-.43)=1.53], and more than twice as likely to complete as announced M&As in consolidating related industries [1/(exp(-.43-.33)=2.14].

Model 4 of Table 3 tests our Hypothesis 3, which states that relational capabilities will reduce the friction in related M&As. Consistent with this hypothesis, we find that firms in a related industry that had a prior inter-organizational relationship were significantly more likely to complete an announced M&A than were firms that did not have a prior relationship. In addition, Model 5 shows that this pattern extended to the context of related growing industries. That is, we find that a prior inter-organizational relationship moderates the negative effect of growing related industries on deal completion likelihood.

Robustness Tests

Results in Table 3 held for a number of robustness tests and model specifications. Models estimated using the two-digit and three-digit SIC measures (as opposed to the four-digit industry relatedness variable in our main models) yielded results that are largely similar to those found in Table 3—albeit with the significance of the effect declining the broader the industry classification measure used.

We also examined the influence of industry relatedness on M&A completion using measures of specific industries. Results were consistent with our life-cycle hypothesis. For example, when the acquirer and target firms were in consolidating industries such as the manufacturing and natural resources sectors, they were significantly more likely to complete an announced M&A than were firms in unrelated industries. By contrast, if acquirer and target firms were in growing industries such as the services or trade sectors, they were less likely to complete an announced M&A. In addition, we considered nine measures based on interactions between target industry (decline, mature, growth) and acquirer industry (decline, mature, growth) variables. Results indicate that completion rates of announced M&As were generally increasing

in increasing acquirer industry growth rate, and decreasing in target industry growth rate. For instance, announced M&As involving an acquirer from a growing industry and a target firm from a declining industry were two and a half time more likely to complete than an announced M&A between an acquirer in a mature industry and a target firm in a declining industry. Thus, our findings with respect to the relatedness hypotheses appear to be strong.

Our results were robust to the inclusion of a measure of shared expertise that was based on the difference in occupational expertise profiles of the acquiring and target firm (calculated from the Occupational Employment Survey) (Coff, 2002). Controlling for this measure strengthened the negative significance of the industry relatedness coefficient. In addition, in models in which we replace the relatedness measure with the shared expertise measure, we found that the more different are the expertise profiles of acquirer and target firms, the less likely are they to complete an announced M&A. These findings suggest that firms in related industries will be more likely to complete when the overlap in their expertise profiles is larger, a point confirmed by including the interaction between the relatedness measure and the shared expertise measure in our models. In particular, M&A completion rates for related M&As were increasing in increasing similarity in acquirer and target firm expertise profiles (significant at the .10 level).

To test the sensitivity of our full model (Model 5), we explored whether the industry and firm level relational effects differed between domestic and cross-border announced M&As. Our findings were very similar across sub-samples of domestic and cross-border M&As, verifying that our model is robust within and across countries. However, although the chi-square tests indicate that dyadic relationships at each level of analysis had an independent and significant influence on M&A completion rates, we also found an interesting interaction between the industry relatedness and the alliance variables. This outcome suggests that when the acquirer

and target firm had been involved in an alliance prior to the M&A announcement, they were more likely to complete the M&A if they were in related industries than if they were in unrelated industries, indicating that related M&A announcements are less likely to be completed, unless they are in declining industries or they had already developed a business relationship.⁵

DISCUSSION AND CONCLUSION

Despite a wealth of research on the effects of industry relatedness on different M&A outcomes, we know very little on how industry similarity might affect the likelihood of the completion or withdrawal of an announced deal. We extend this research to the second stage of the M&A process, focusing on conceptualizing and assessing mechanisms linking relatedness to deal completion or withdrawal.

We feel that our study contributes to the current strategic literature in several key ways. First, while the majority of M&A research indicates that deal relatedness is valued positively by the market at the time of M&A announcement (Bettis, 1981; Christensen and Montgomery, 1981) and that being in the same industry will also lead to higher value enhancing synergies (Singh and Montgomery, 1987; Larsson and Finkelstein, 1999), our arguments and empirical findings suggest a somewhat different logic for the negotiation stage of the M&A process. That is, in general, when two firms seek to negotiate an announced related merger, the chances of deal

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⁵ We also conducted a number of robustness tests with respect to our controls measures. For example, our main results were largely unchanged when we included a variable for GDP growth of the target firm's country as a control measure in lieu of exchange rate. In addition, results were robust to the inclusion of controls such as whether the target was family owned (cf. Aguilera and Jackson, 2003), the knowledge intensity of the target firm's industry (cf. Coff 1999; 2002), and a dummy measure for the Top 50 M&As—with the coefficient on this variable slightly positive (indicating that larger announced M&As were more likely to be completed) but not significantly so. ⁶ This research question is still open to debate because there are some scholars (Lubatkin, 1987; Seth, 1990) who have shown that this is not always the case. Although the predominant logic is that relatedness tends to be more positively viewed.

completion will be lower than in a diversified M&A announcement because there is likely to be more friction.

Second, our knowledge of the announcement to completion/withdrawal M&A stage is fairly limited because it comes largely from finance scholars who identify the key market pressures leading to the outcome of an announced M&A, and attribute withdrawal to the existence of three main factors: competing bids, method of payment forms, and firms' financial distress (Pickering, 1983; Weston, Siu, and Johnson, 2001). We are able to shed light on the strategic dynamics that take place in the negotiation stage and demonstrate how in addition to important financial market mechanisms, the existence of friction between firms in the same industry influences the M&A announcement outcome.

Third, we find that our study offers an innovative research design as most studies of M&As tend to take a focal-firm perspective whereas we adopt a very explicit dyadic perspective. That is, while most existing M&A research is designed under the assumption that most of the decision-making power is held by the acquirer (which is more likely to be the case in the post-acquisition stage), during the negotiation M&A stage, it is critical to assess the importance of having a cooperative inter-firm relationship, as well as the strategic context within which the organizational action is embedded (related vs. unrelated).

Fourth, we show that the industry life cycle plays a key role in linking relatedness to deal completion. In particular, we demonstrate that the negative effect of relatedness of deal completion is amplified when the acquirer and target firms in the announced deal are in a related growing industry. We claim that this relationship stems from the increased friction among acquirer and target firms in growing industries relative to consolidating industries. For example,

in consolidating industries such as the defense industry, firms will be more apt to accept an announced M&A rather than risk that future offers may be less favorable.

Fifth, we show that the friction in related M&As—particularly in growing industries—is alleviated when the two firms have engaged in a previous cooperative relationship such as an alliance. Moreover, our findings help to fill in important gaps in the relational capabilities literature—that has generally focused on one type of inter-firm relationship (e.g., alliances) and claims that past inter-firm relationships will encourage firms to engage in future relationships of the same type (Gulati, 1999). For example, although some evidence shows that belonging to an alliance is an important predictor of forming a future acquisition (Nanda and Williamson, 1995), there is no systematic empirical research confirming this predicted relationship in the context of deal completion. We provide strong evidence to support this important extension of the relational capabilities argument to a new inter-firm relationship outcome (e.g. deal completion). Our findings thus complement those of Wang and Zajac (2007), who focus on the strategic choice between inter-firm governance structures (i.e., alliances vs. acquisition) in order to highlight the usefulness of the knowledge developed during the alliance and its applicability in subsequent governance structure.

In addition, at the conceptual level, we believe that the relational capabilities argument is more readily applicable to the negotiation stage in the M&A process than to the post-acquisition stage. As Wang and Zajac (2007: 1313) note, "alliances help firms to develop skills and capabilities, such as being able to communicate with each other, resolve conflicts, and negotiate effectively for both firms' benefits." These capabilities become critically important during the negotiation stage when both firms are still independent and have to interact to reach an

agreement, yet they will not be as critical in the post-integration stage when the two former alliance firms are part of the same new firm.

Limitations and Directions for Future Research

A number of limitations of our study and areas for future research should be mentioned. For instance, there are certain explanations predicting the outcomes of related M&A announcements that cannot be addressed within the scope of this study. Future studies could complement our theoretical model by examining the effects of managerial behavior such as hubris or strategic signaling on deal completion. Similarly, some actions that occur during the M&A process are not readily observable, such as illegal activity in the case of insider trading. Future research could also explore how levels of analysis such as group identity influence organizational outcomes.

Moreover although the largest M&As—involving by default firms in the most industrialized countries—represent an appropriate testing ground for our study, research would benefit from testing our proposed model in other regions of the world, such as Asia, and in samples of medium- or small-sized firms. In addition, like other studies, we maintain that relational capabilities provide the target and acquirer firms with greater knowledge and benefits that firms without such experience do not have (Wang and Zajac, 2007). Although research is often consistent with this assumption, it might not hold in all contexts (cf. Zollo and Singh, 2004).

As an extension to our research, it would be interesting to investigate what ends up happening to the announced M&As that consummate. For example, how different aspects of relatedness are predictors of whether or not the completed deals will be economically and

socially successful down the road? As we note, that an announced M&A was not completed does not necessarily imply a failure. In other words, a completed deal does not guarantee financial success or effective post-M&A integration down the road. For instance, will merging firms in related and growing industries perform better post-acquisitions than those in related and declining industries? That is, are the predictors of completion also good predictors of post-acquisition performance? Furthermore, results from our control measures indicate that friction might operate at the country and organization levels. For example, consistent with Aguilera, Dencker and Escandell (2007), we find evidence that the greater is the national culture distance between the target and acquiring firms' countries, the less likely is an announced M&A to be completed. Similarly, we find that when an announced M&A involves a merger of equals, these announcements are les likely to complete than when the gap in firm size is large.

Future research could also expand on studies of foreign modes of market entry and explore how the ownership percentage of acquisitions (majority/minority ownership) will determine the outcome of an announced M&A. Finally, researchers have identified distinct merger waves over the past century, yet motivations behind these waves arguably differ. Thus, it would be fascinating to explore and compare the impact of embedded relational logics on friction in the courtship M&A stage across merger waves.

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Table 1. Descriptive statistics of the variables (N=1100)

| Variable | Mean | S. D. | Min. | Max. |
|------------------------------|------|-------|------|-------|
| Deal Completion | .79 | .41 | 0 | 1 |
| Related industry | .56 | .50 | 0 | 1 |
| Life-cycle (growing) | .37 | .48 | 0 | 1 |
| Life-cycle (consolidating) | .19 | .20 | 0 | 1 |
| Relational Capabilities | .08 | .28 | 0 | 1 |
| Acquirer diversification | 5.00 | 3.82 | 0 | 25 |
| Acquirer M&A experience | .12 | .33 | 0 | 1 |
| Acquirer is a public company | .89 | .32 | 0 | 1 |
| Deal attitude (hostile) | .10 | .30 | 0 | 1 |
| Target is bankrupt | .01 | .11 | 0 | 1 |
| Target country risk | 1.93 | .24 | 1.31 | 3.53 |
| Merger of equals | .07 | .25 | 0 | 1 |
| Competing bidders | .48 | .50 | 0 | 1 |
| National cultural distance | 7.46 | 17.75 | 0 | 91.44 |
| Language difference | .11 | .31 | 0 | 1 |
| Same legal system | .89 | .31 | 0 | 1 |
| Size of deal (log value) | 7.87 | 1.31 | 5.33 | 12.22 |
| Method of payment (cash) | .22 | .42 | 0 | 1 |
| Method of payment (stock) | .26 | .44 | 0 | 1 |
| Target country exchange rate | .98 | .20 | .00 | 3.62 |
| Duration of second stage | .47 | .41 | .00 | 5.45 |
| Year 1991 | .09 | .29 | 0 | 1 |
| Year 1992 | .09 | .29 | 0 | 1 |
| Year 1993 | .09 | .29 | 0 | 1 |
| Year 1994 | .09 | .29 | 0 | 1 |
| Year 1995 | .09 | .29 | 0 | 1 |
| Year 1996 | .09 | .29 | 0 | 1 |
| Year 1997 | .09 | .29 | 0 | 1 |
| Year 1998 | .09 | .29 | 0 | 1 |
| Year 1999 | .09 | .29 | 0 | 1 |
| Year 2000 | .09 | .29 | 0 | 1 |
| Year 2001 | .09 | .29 | 0 | 1 |

Table 2. Correlation matrix

| Table 2. Correlation in | iatrix | | | | | | | | | | | | | |
|---|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. | 12. | 13. | 14. |
| 1. Deal Completion | 1 | | | | | | | | | | | | | |
| Related industry | 06** | 1 | | | | | | | | | | | | |
| Life-cycle (growing) | 05* | .88*** | 1 | | | | | | | | | | | |
| 4. Life-cycle (consolidating) | .01 | .15*** | 17*** | 1 | | | | | | | | | | |
| Relational Capabilities | .02 | .05 | .04 | 01 | 1 | | | | | | | | | |
| Acquirer diversification | .08** | 10*** | 14*** | 01 | .02 | 1 | | | | | | | | |
| Acquirer M&A experience | .06** | 04 | 01 | 03 | .08*** | .12*** | 1 | | | | | | | |
| 8. Acquirer is a public company | 01 | 01 | .01 | 08** | .09*** | .20*** | .10*** | 1 | | | | | | |
| 9. Deal attitude (hostile) | .41*** | .03 | .06** | 04 | 04 | 02 | .03 | 02 | 1 | | | | | |
| Target is bankrupt | 16*** | 01 | .00 | 02 | 03 | 07** | 04 | 11*** | 08** | 1 | | | | |
| Target country risk | 08*** | 01 | 04 | .06** | 02 | 12*** | 05* | 08* | .02 | 05* | 1 | | | |
| Merger of equals | 02 | .05 | .03 | 00 | .08*** | 01 | 02 | .07** | .09*** | 03 | .03 | 1 | | |
| 13. Competing bidders | 23*** | 03 | 04 | 00 | .05* | 00 | .06** | 05* | 24*** | .12*** | .02 | 09** | 1 | |
| National cultural distance | .01 | 01 | 02 | 00 | 06* | .00 | 02 | 07** | .01 | .02 | .23*** | 02 | 05* | 1 |
| Language difference | 05 | .04 | .04 | .01 | .05* | 01 | .04 | .06** | 03 | 01 | 19*** | .01 | .02 | 84*** |
| Same legal system | 03 | .07** | .06** | .03 | .05* | 04 | 01 | .02 | 03 | 01 | 12*** | .02 | .03 | 77*** |
| 17. Size of deal (log value) | 02 | .14*** | .14*** | .01 | .20*** | .12*** | .16*** | .14*** | 00 | 11*** | 04 | .19*** | .00 | .02 |
| 18. Method of payment (cash) | 04 | 11*** | 12*** | .05* | 06* | .02 | 09*** | 21*** | 17*** | .08** | .03 | 14*** | .07** | .15*** |
| 19. Method of payment (stock) | .03 | .08*** | .10*** | 05* | .06** | .06** | .10*** | .18*** | .11*** | 07** | 23*** | .12*** | 13*** | 21*** |
| 20. Target country exchange rate | .00 | .00 | .00 | .05 | 04 | .02 | 07** | .00 | 01 | .00 | 02 | .01 | .01 | 13*** |
| 21. Duration of second stage | .07** | .11*** | .11*** | 01 | .06** | 07** | .04 | .00 | .07** | .13*** | 07** | .11*** | .08*** | 08*** |
| 22. Year 1991 | 01 | 08*** | 09*** | .00 | 06** | 03 | .01 | 09*** | 07** | .05 | .05* | 08*** | .01 | 02 |
| 23. Year 1992 | 02 | 02 | 02 | 02 | 04 | 05 | 06* | 04 | .02 | .16*** | .07** | 01 | .07** | .04 |
| 24. Year 1993 | .01 | 08** | 06** | 04 | 01 | .00 | 03 | 04 | .03 | 01 | 02 | 06* | .00 | 02 |
| 25. Year 1994 | 02 | .00 | 01 | 02 | 03 | 01 | .01 | 02 | .01 | .05 | 06** | 03 | .12*** | 10*** |
| 26. Year 1995 | 01 | .03 | .04 | .02 | 00 | .03 | .01 | .01 | 08*** | 04 | 06** | .02 | .07** | 02 |
| 27. Year 1996 | 00 | 04 | 05 | .02 | .01 | 00 | 06* | 02 | .00 | 03 | 04 | .02 | .03 | 01 |
| 28. Year 1997 | 02 | 01 | .01 | 02 | 01 | 04 | .01 | .04 | 02 | 04 | .00 | .03 | 05* | 03 |
| 29. Year 1998 | .04 | .06** | .06** | .04 | .07** | .05 | .02 | .03 | .05 | 04 | .00 | .08*** | 14*** | 01 |
| 30. Year 1999 | 06** | .08** | .06** | .00 | .05* | .02 | 00 | .05* | 02 | 03 | .06* | .02 | .05 | .04 |
| 31. Year 2000 | .09*** | .06* | .06** | 02 | .07** | .02 | .08*** | .04 | .06* | 04 | 05 | 02 | 05* | .08*** |
| 32. Year 2001 | 01 | .00 | 00 | .02 | 04 | .00 | .03 | .02 | .02 | 03 | .04 | .04 | 11*** | .05 |

Table 2. (Continued)

| ruete 2: (Continueu) | | | | | | | | | | | | | | | | | | |
|---------------------------------------|--------|--------|--------|--------|--------|--------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 15. | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. | 24. | 25. | 26. | 27. | 28. | 29. | 30. | 31. | 32. |
| Language difference | 1 | | | | | | | | | | | | | | | | | |
| Same legal system | .84*** | 1 | | | | | | | | | | | | | | | | |
| 17. Size of deal (log value) | 05* | 06** | 1 | | | | | | | | | | | | | | | |
| 18. Method of payment (cash) | 17*** | 14*** | 20*** | 1 | | | | | | | | | | | | | | |
| 19. Method of payment (stock) | .20*** | .16*** | .03 | 32*** | 1 | | | | | | | | | | | | | |
| 20. Target country exchange rate | .12*** | .06* | 18*** | .06* | .03 | 1 | | | | | | | | | | | | |
| 21. Duration of second stage | .05 | .07** | .11 | 15*** | .04 | .00 | 1 | | | | | | | | | | | |
| 22. Year 1991 | .01 | .02 | 39*** | .07** | 01 | .08*** | 02 | 1 | | | | | | | | | | |
| 23. Year 1992 | .00 | .01 | 34*** | .04 | .00 | .06* | .04 | 10 | 1 | | | | | | | | | |
| 24. Year 1993 | 01 | 00 | 29*** | .02 | 01 | .06** | 03 | 10 | 10 | 1 | | | | | | | | |
| 25. Year 1994 | .06** | .06** | 16*** | .09*** | .00 | .12*** | 03 | 10 | 10 | 10 | 1 | | | | | | | |
| 26. Year 1995 | .02 | .02 | 02 | .07** | .03 | .06** | .03 | 10 | 10 | 10 | 10 | 1 | | | | | | |
| 27. Year 1996 | 01 | 01 | .03 | 06* | 03 | 03 | .02 | 10 | 10 | 10 | 10 | 10 | 1 | | | | | |
| 28. Year 1997 | .04 | .03 | .10*** | .02 | .01 | 00 | 03 | 10 | 10 | 10 | 10 | 10 | 10 | 1 | | | | |
| 29. Year 1998 | .02 | .01 | .27*** | 07** | .08*** | .14*** | 01 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1 | | | |
| 30. Year 1999 | 06** | 05* | .37*** | 09*** | 04 | 25*** | .05* | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1 | | |
| 31. Year 2000 | 09*** | 07** | .30*** | 07** | .02 | 13*** | .03 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1 | |
| 32. Year 2001 | .01 | 02 | .12*** | 02 | 06** | 12*** | 04 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1 |

Statistically significant at *** p < 0.01 (two-tailed); ** p < 0.05; * p < 0.10All coefficients for the correlations among the year dummy measures are significant at the p < 0.01 level.

Table 3. The likelihood of completing an announced M&A: logit regression analysis with two possible outcomes (0=withdrawal; 1=completion).

| Variable Variable | Model 1 | . , | Model 3 | Model 4 | Model 5 |
|-----------------------------|---------------|-------------------|-------------------|----------------|-------------|
| Related industry | | 44** | | 53*** | |
| • | | (.18) | | (.18) | |
| Life-cycle (growing) | | | 43** | | 52*** |
| | | | (.17) | | (.19) |
| Life-cycle (consolidating) | | | .33 | | .37 |
| | | | (.55) | | (.55) |
| Related industry * | | | | | |
| Relational Capabilities | | | | 1.25** | |
| | | | | (.60) | |
| Life-cycle (growing) * | | | | | |
| Relational Capabilities | | | | | 1.30** |
| | | | | | (.58) |
| Relational Capabilities | .66** | .67** | .67** | 10 | 05 |
| | (.31) | (.33) | (.32) | (.53) | (.48) |
| Acquirer diversification | .08*** | | .07** | .07** | .07** |
| | (.03) | (.03) | (.03) | (.03) | (.03) |
| Acquirer M&A experience | | .54* | .56* | .57* | .58** |
| | (.30) | (.29) | (.29) | (.29) | (.29) |
| Acquirer is a public | | | - 0 | 4.0 | - 0 |
| company | 38 | | 38 | | 38 |
| | (.30) | | | | (.31) |
| Deal attitude (hostile) | -2.28*** | | | | |
| — | | (.24) | | | |
| Target is bankrupt | | -2.80*** | | | |
| T | (.72) | (.69) | (.69) | (.69) 97*** | (.69) |
| Target country risk | | 99*** | | | |
| N/ C 1 | | (.35) | | | |
| Merger of equals | | 73** | | | |
| Commenting 1: 11 am | (.35) | (.35) -1.03*** | (.36) -1.04*** | | |
| Competing bidders | | | | | |
| Nistianal sultural distance | ` / | (.20) | ` ′ | ` ′ | ` ′ |
| National cultural distance | | 014* (.009) | | | 016* |
| Language difference | | (.009) -1.40** | | | |
| Language unference | | | | | (.56) |
| Sama lagal system | (.52) .14 | (.55) .24 | (.55) .18 | (.56) .26 | (.36) |
| Same legal system | (.37) | (.39) | (.40) | (.40) | (.41) |
| Size of deal (log value) | (.57) 24** | (.39) 21* | 20 | (.40) 21* | (.41) 19 |
| Size of deal (log value) | (.12) | (.12) | (.12) | (.12) | 19 (.12) |
| Method of payment (cash) | .11 | .09 | .07 | .07 | .06 |
| Memod of payment (cash) | (.24) | (.23) | (.24) | (.23) | (.24) |
| | (.24) | (.23) | (. <i>24)</i> | (.23) | (.44) |

Table 3. (Continued)

| Table 3. (Continued) | Mod-11 | Mod-10 | Mod-12 | Mod-1 4 | Mod-1-5 |
|---|----------|----------|----------|----------|----------|
| Variable (4.4.1) | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| Method of payment (stock) | 43* | 39 | 39 | 40* | 39 |
| TD | (.24) | (.24) | (.24) | (.24) | (.24) |
| Target country exchange rate | .03 | .08 | .04 | .05 | .01 |
| 5 | (.43) | (.44) | (.45) | (.44) | (.46) |
| Duration of second stage | 1.57*** | 1.64*** | 1.61*** | 1.64*** | 1.62*** |
| 5 | (.49) | (.50) | (.50) | (.50) | (.50) |
| Duration of second stage (sq) | 36*** | 36*** | 36*** | 36*** | 36*** |
| | (.14) | (.14) | (.14) | (.14) | (.14) |
| Year 1992 | .03 | .06 | .05 | .04 | .06 |
| | (.42) | (.42) | (.42) | (.42) | (.42) |
| Year 1993 | 18 | 19 | 20 | 18 | 20 |
| | (.42) | (.41) | (.42) | (.41) | (.42) |
| Year 1994 | 14 | 07 | 11 | 09 | 12 |
| | (.43) | (.43) | (.43) | (.42) | (.43) |
| Year 1995 | .25 | .31 | .29 | .32 | .29 |
| | (.47) | (.46) | (.47) | (.46) | (.47) |
| Year 1996 | .08 | .09 | .02 | .05 | 02 |
| | (.44) | (.44) | (.45) | (.44) | (.45) |
| Year 1997 | .12 | .11 | .10 | .12 | .10 |
| | (.48) | (.48) | (.49) | (.48) | (.49) |
| Year 1998 | .33 | .36 | .30 | .35 | .29 |
| | (.53) | (.53) | (.54) | (.54) | (.54) |
| Year 1999 | 15 | 10 | 18 | 12 | 22 |
| | (.55) | (.56) | (.56) | (.56) | (.56) |
| Year 2000 | .91 | .96 | .91 | .93 | .89 |
| | (.60) | (.60) | (.61) | (.61) | (.62) |
| Year 2001 | 06 | 03 | 08 | 04 | 10 |
| | (.48) | (.47) | (.48) | (.47) | (.48) |
| Constant | 6.57*** | 6.47*** | 6.51*** | 6.56*** | 6.61*** |
| | (1.54) | (1.53) | (1.57) | (1.54) | (1.58) |
| Log-likelihood | -432.12 | -429.24 | -428.97 | -427.70 | -427.24 |
| Chi-square | 200.5*** | 198.0*** | 200.1*** | 205.6*** | 206.2*** |
| Df | 28 | 29 | 30 | 30 | 31 |
| | .0001 | .0001 | | .0001 | .0001s |
| Prob. $> \chi 2$ Statistically significant at *** | | | | | |

Statistically significant at *** p < 0.01 (two-tailed); ** p < 0.05; * p < 0.10. Standard errors are in parentheses (N=1100). Year=1991 is the omitted year dummy category.

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