

## WHEN THE TARGET MAY KNOW BETTER: EFFECTS OF EXPERIENCE AND INFORMATION ASYMMETRIES ON VALUE FROM MERGERS AND ACQUISITIONS

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**Research summary:** Extending research on the effect of experience on acquisition outcomes, we examine how the differential in previous M&A experience between the target and the acquirer affects the value they, respectively, obtain when the acquirer takes over the target. Drawing on literature about organizational learning, negotiation, and information economics, we theorize that the party with greater experience will be able to obtain more value. Furthermore, we theorize that the effect of differential M&A experience on value obtained is contingent on the level of information asymmetry the acquirer faces with respect to the target, specifically as a function of the target's product-market scope and whether the deal is friendly. We test and find support for these predictions in a sample of 1,241 M&As over a 30-year period.

**Managerial summary:** Corporate strategy is about a firm's scope and development decisions and outcomes, but corporate strategizing is incomplete unless managers anticipate the moves of other economic actors. We demonstrate the importance of these points when it comes to learning to make acquisitions. Using an innovative research design and theory that enables comparison between acquirer and target gains, we show that whatever their firm's acquisition history and capabilities, acquisitive managers should mind the negotiation and other pitfalls that arise when target firms possess ample acquisition experience of their own. We also demonstrate that the effect of experience advantage, whereby the more experienced party benefits, depends on the target firm's scope and whether the deal is friendly—two dimensions that acquirers can and should take into account. © 2016 The Authors. *Strategic Management Journal* published by John Wiley & Sons Ltd.

## INTRODUCTION

Among the leading themes for research on mergers and acquisitions (M&As) is whether the deals

create economic value. The role of prior experience and experiential learning has featured prominently in this literature (for a review, see Barkema and Schijven, 2008a), probing when and how prior experience contributes to value creation or improves acquisition performance. Although this has offered us many valuable insights on what drives value creation in M&As, less is known about how the value created in an M&A deal is shared among the acquirer and target.<sup>1</sup> As a result, we have limited understanding of reasons why one party sometimes

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<sup>1</sup> Throughout the article, we refer to *value creation* for parsimony, but our arguments hold fully in cases of value destruction, that is, if one or both parties lose market value upon M&A announcement.

gains more than the other party *within* a particular M&A deal, and which factors determine how much of the total amount of value created in the deal each party obtains. Indeed, the few studies that have looked at acquirer versus target outcomes in M&A deals (e.g., Seth, Song, and Pettit, 2000, 2002) have highlighted that focusing solely on value creation leads to an incomplete picture of how acquirers and targets fare in M&As. Addressing this gap in the literature is critical to understanding under what conditions acquirers and targets benefit from M&As.

To address this issue, we draw on the literatures on organizational learning from experience, on bargaining, and on information economics. Our premise is that a balanced understanding of value obtained by acquirer and target alike requires examining not only the acquirer's M&A experience, but also comparing it with the target's M&A experience since the respective outcomes are the result of a bargaining process in which both parties play an active role. Our research question is: What is the effect of differential M&A experience on the respective amounts of value obtained by the acquirer and target, and what are contingencies for this effect? Specifically, we argue that the differential between the acquirer and the target's experience determines which one will bargain better terms, and thereby, obtain more value at the expense of the other party. We then draw on the information economics literature to argue that the effect of differential experience on the respective value each party obtains is contingent on the information asymmetry the acquirer faces with respect to the target. We examine our theoretical predictions using a sample of 1,241 M&As that features detailed target as well as acquirer and deal characteristics.

We aim to make several contributions to strategy research at the union of the literature on M&As, organizational learning, and information economics. First, we contribute to the M&A literature by improving the understanding of the respective amounts of value obtained by the acquirer and by the target, and how they compare. Carefully controlling for how much value arises in total, we show that differential experience influences how much value each party obtains from the deal. Furthermore, contrary to much of the M&A literature that understandably focuses on acquirer characteristics, we hone in on the active and important role of the target (see also Graebner and Eisenhardt, 2004; Graebner, 2009) and explicate effects of target characteristics and decisions.

Second, we contribute to research on organizational learning by showing that value obtained depends on both parties' experience. Most prior studies have only theoretically considered the acquirer's experience, and even the few studies that considered both parties' experience (e.g., Porrini, 2004) did so in isolation of each other without theorizing about relative experience. Furthermore, the organizational learning literature has mainly provided insights on how experience helps the development of an acquisition capability, which helps to create value (Barkema and Schijven, 2008a); we complement this by highlighting that experience also helps to *capture* value. We develop this theory by also integrating arguments from the literature on bargaining, from both organization behavioral (negotiation) and economic (game theoretical and experimental) perspectives. Both perspectives have identified experience as a source of learning leading to improved bargaining outcomes.

Third, whereas the application of information economics to M&A strategy has largely focused on the effect of information asymmetry on how M&A deals are structured (e.g., Balakrishnan and Koza, 1993; Cuypers, Ertug, and Hennart, 2015; Dow, Cuypers, and Ertug, 2016), we show that information factors are also important contingencies that affect performance as evidenced here by the respective value obtained upon deal announcement. Thus, we extend the information economics perspective, which is of growing importance for strategy research (e.g., Ragozzino and Reuer, 2011; Reuer *et al.*, 2013).

Altogether, our contributions are phenomenological in addressing the respective value accruing to acquirers versus targets and in further evidencing the role of targets, but also more broadly theoretical in integrating the literatures on experiential learning, bargaining, and information economics in an original way that yields a contingency model of how differential experience and information asymmetry jointly affect a strategic outcome.

## THEORY

Since an acquisition is a transaction between the owners and managers of the acquirer firm (in short, the acquirer) and those of the target firm (in short, the target), the total value that is created (or destroyed) through an acquisition has to be

distributed between these two sides. M&A outcomes often differ sharply between acquirers and targets (Asquith, Bruner, and Mullins, 1983; Datta, Pinches, and Narayanan, 1992; Morck, Schleifer, and Vishny, 1990). The bargaining between acquirer and target (e.g., Aktas, De Bodt, and Roll, 2010) is likely to affect their respective gains. More precisely, negotiations are a crucial part of creating M&A deals as merging firms have to decide on a number of issues—not just the price, but also the retention of resources, including top managers and their roles, residual target headquarters or company name, and restructuring plans (Walsh, 1989; Wulf, 2004). Walsh (1989) thus emphasized the importance of taking into account the attributes of *both* parties as well as the transaction between them, when studying the acquisition negotiation and its outcome.

In this manner, prior acquisition experience affects not only the potential for value creation as described in extant literature, but also the way value is distributed. Through the accumulation of experience, firms learn how to negotiate deals (see Nadler, Thompson, and Van Boven, 2003). This, in turn, has implications for the value accruing to the acquirer and the target (Barkema and Schijven, 2008a). Thus, Capron and Shen (2007) observed that, in acquisitions of private targets by public firms, the acquirer tends to appropriate more value; they attributed this to the private target having less acquisition experience, and consequently, less developed negotiation skills, than the acquirer (though they did not measure target experience). These insights suggest that the differential acquisition experience of the target and the acquirer will play a crucial role in determining which one will receive how much of the value arising in the deal.

The notion that the respective levels of experience of two parties will determine the outcome of negotiations has been documented in various contexts in the literature on negotiation from a psychological perspective, on one hand, and in literature on game theory and experimental economics, on the other hand (e.g., Fudenberg and Levine, 1998; Thompson, 1990).

First, the negotiation literature has shown that parties involved in past negotiations learn strategies and skills that they can leverage in subsequent negotiations, especially with other parties that lack similar skills, so that experience asymmetries determine distributional outcomes (Thompson, 2008). Specifically, there is compelling evidence in the literature

that experience helps negotiators create value, in particular, by sorting better through negotiation issues ("log-rolling") (Loewenstein and Thompson, 2006). Moreover, experience increases negotiators' ability to take the perspective of opponents (Neale and Bazerman, 1983; Thompson, 1990) and to obtain information on the other party's preferences without this being explicitly disclosed (Thompson, 2008). Experienced negotiators thus develop a more accurate representation of their opponent's priorities, alternatives, and behavior (Thompson, 1990). Through experience, negotiators also learn to claim greater value (increase their respective value obtained) by knowing when to depart from equal sharing among parties toward maximizing their own value, and by exploiting their knowledge of the other party's preferences to deploy tactics over the issues involved (Loewenstein and Thompson, 2006). The negotiation literature has validated both performance feedback and successive examples, both of which result directly from accumulated experience as learning mechanisms that enable the above advantages (Loewenstein and Thompson, 2006). On balance, a considerable body of evidence from simulated negotiations shows that more experienced parties negotiate more effectively and capture more value than their less experienced counterparts (Loewenstein and Thompson, 2006; Neale and Bazerman, 1983; Thompson, 1990). In distributive negotiations—that is, where the parties compete to divide the pie—experienced negotiators perform particularly well and gain more than their naïve counterparts (Murnighan *et al.*, 1999).

Second, game theoretic and experimental economics researchers have also looked at the impact of experience on the outcomes of strategic interactions, and described related mechanisms that add up to an experience advantage in negotiations. They found that adaptive learning occurs and is carried over to subsequent games, allowing the player with more experience to capture more value (e.g., Cooper, Garvin, and Kagel, 1997). Players learn both from their past choices and by updating their beliefs about what other players will do (Camerer, 2003; Camerer and Ho, 1999). A more experienced player will be able to better anticipate the behavior of the other player, estimate his or her reservation price, and adjust his or her own strategy based on feedback (Fudenberg and Levine, 1998). Moreover, as players gain experience, they start to take into account that their counterparts are also learning and adapting their behavior, and thus, stay ahead of the

counterparts, in a development referred to as *sophistication* in the behavioral game theory literature: More experienced players will exhibit more sophisticated behavior than their less experienced counterparts, giving them an advantage in anticipating the behavior of their opponents and improving their own strategies based on these insights (Camerer, Ho, and Chong, 2001).

Thus, between them, the negotiation literature and the (behavioral) game/experimental literature identify a nexus of mechanisms for an experience advantage in negotiations: Superior experience helps negotiators identify and sort negotiation issues, figure out counterparts' preferences, map each party's preference onto the issues, decide when and how to move toward an advantageous distribution, and implement tactics that maximize their value obtained.

Asymmetries in experience also stand to affect the outcome of M&A negotiations and interactions. Here, the principal basis of applicable experience is having done previous M&As. This entails the same steps and mechanisms as described in the above literature: identifying negotiation points, anticipating the acquirer and target firms' respective preferences, and manipulating the deal to maximize the value obtained given the total value created. Therefore, we expect that differences in experience will explain which party obtains more or less value in the context of M&As. Specifically, the asymmetry linked with negotiation outcomes is likely to come from the extra experience that the acquirer has relative to the target or vice versa (i.e., differential experience). Thus, the party with more previous M&A experience, whether it is the acquirer or the target, stands to obtain more of the value generated by the deal.

Anticipating our research design where we examine value obtained by the target as well as the acquirer, we predict:

*Hypothesis 1a: The value that the acquirer obtains upon an acquisition is higher, the more previous M&A experience it has versus the target.*

*Hypothesis 1b: The value that the target obtains upon an acquisition is higher, the more previous M&A experience it has versus the acquirer.*

The preceding initial hypotheses describe the effect of differential experience on value obtained,

or in short, what we refer to below as the "experience advantage." Nevertheless, several studies have shown that returns to experience are contingent (e.g., Vanneste and Puranam, 2010). Likewise, we expect the experience advantage to have a contingent component. We propose that there will be an interaction between the amount of information asymmetry the acquirer faces and the experience advantage. That is because information asymmetry complicates target evaluation and the negotiation process, so differential experience is all the more relevant under information asymmetry.

The information economics literature tells us that many acquisitions are complicated by information asymmetry between acquirers and potential targets (e.g., Reuer and Ragozzino, 2008). This has implications for both acquirer and target. On the one hand, acquirers face difficulties in assessing the value of targets' resources, and targets may try to hide information that, if known, would reduce their perceived value (Balakrishnan and Koza, 1993; Coff, 1999; Reuer and Ragozzino, 2012; Reuer, Tong, and Wu, 2012). Such information asymmetry may lead to acquirers' overpaying for their targets (Coff, 1999) as it gives targets an informational edge in bargaining (Samuelson, 1984). On the other hand, even targets that have no intention of acting in an opportunistic manner (by hiding information from the acquirer) may suffer because of information asymmetry, as they will struggle to convey believably the true value of their resources during negotiations (Dierickx and Koza, 1991; Reuer *et al.*, 2012).

Differential M&A experience will be crucial in determining which party can better overcome information asymmetry, and potentially exploit it to obtain more beneficial terms. The M&A literature, again focusing mostly on the acquirer side, has argued that prior M&A experience translates into hazard mitigating capabilities (Reuer, Shenkar, and Ragozzino, 2004). Experienced acquirers will be better able to recognize information asymmetry and deal with it when conducting due diligence and target evaluation, assessing targets' claims, and negotiating the terms of the deal (Dierickx and Koza, 1991; Reuer and Ragozzino, 2008; Reuer *et al.*, 2004). Furthermore, acquirers with prior M&A experience are more likely to transfer risk of overpayment from the acquirer to the target in the presence of information asymmetry (Reuer and Ragozzino, 2008). We argue that, likewise, more experienced targets can exploit the information

asymmetry to their benefit, such as by disguising weaker assets or exaggerating synergy potential. They can also better convey the value of their resources where it benefits them. Therefore, we expect the effects proposed in Hypotheses 1a and 1b (the experience advantage) to vary depending on information asymmetry conditions. Below, we consider two such conditions to derive specific hypotheses.

The first important source of information asymmetry that we consider is the product-market scope of the target firm, which reflects the number of economic activities it performs—more precisely, the number of industries it operates in (Peng, Lee, and Wang, 2005). A firm's scope is a function of its reliance on indivisible assets that can be shared among product-markets, specifically knowledge-based assets (Panzar and Willig, 1981; Teece, 1980). Thus, firm scope is directly associated with the presence of proprietary know-how and related knowledge-intensive assets, which cannot be readily transferred, transacted, or valued (Arrow, 1971; Teece, 1980). Yet, meanwhile, the intensity and potential complementarity of knowledge assets in high-scope firms make an acquisition more compelling as a means of accessing such assets (Teece, 1982). Therefore, aside from their size, firms that operate in more industries are less transparent and require more in-depth expertise to understand (Malerba *et al.*, 2008; Teece, 1982; Teece *et al.*, 1994). As a target firm's scope increases, there is thus an increase in the information asymmetry that needs to be overcome to make an acquisition possible (Balakrishnan and Koza, 1993; Reuer and Koza, 2000).

For our purpose, the information asymmetry that characterizes targets with broader product-market scope exacerbates the challenge for acquirers of assessing the true value and combinatory potential of these collections of units and knowledge bases. This makes the benefits of a favorable experience differential even greater from the acquirer's standpoint as experience helps the acquirer overcome or compensate for information asymmetry (Reuer and Ragozzino, 2008). If the experience differential is in the target's favor, conversely, that firm should be better able to exploit the information asymmetry for bargaining advantage, and likewise, to overcome any buyer reluctance due to asymmetry by better conveying the true value of its assets when it so chooses. In short, for acquirer and target alike, having more experience than the other party

becomes particularly useful when the target is broad in product-market scope. Hence, we predict:

*Hypothesis 2: When the product-market scope of the target firm is broader, the association between the acquirer's (target's) differential M&A experience versus the target (acquirer) and the value that the acquirer (target) obtains upon an acquisition is stronger.*

Second, the severity of the information asymmetry issue also depends on whether the attitude of the target toward the acquirer is friendly, that is, whether the target firm's management and board of directors agree to the deal. Targets tend to take more defensive actions and have more incentive to sabotage negotiations or behave opportunistically in nonfriendly deals, thereby severely complicating the acquisition process (e.g., Finkelstein and Haleblian, 2002). Conversely, in friendly deals, target managers welcome the deal and have less incentive to withhold or manipulate data given that their reputation and likely career in the post-merger company are at stake; rather, they are committing to openly sharing information to help the acquirer better understand the target. In sum, when a deal is friendly, an acquirer will face less information asymmetry about the potential costs and overall value of the deal than when the deal is nonfriendly (Gao, 2011). This reduces the benefits associated with either party's experience advantage in dealing with information asymmetry (as discussed above). Accordingly, we predict:

*Hypothesis 3: When the deal is friendly, the association between the acquirer's (target's) differential M&A experience versus the target (acquirer) and the value that the acquirer (target) obtains upon an acquisition is weaker.*

## METHODS

### Sample

Testing the above hypotheses requires a sample of M&As where the performance of both acquirer and target can be measured and compared. We obtained such a sample from Thomson Financial's Security Data Corporation (SDC) database, which has been used frequently in M&A research (e.g., Cuypers

*et al.*, 2015; Dow *et al.*, 2016; Halebian and Finkelstein, 1999; Hayward, 2002). We obtained stock market data from Thomson Financial's Datastream database to calculate the dependent variables, and we used SDC, Datastream, and Standard & Poor's Compustat to compile the independent and control variables. Our sample is distinctive in that we collected data on M&As between pairs of firms that were both listed on either the New York Stock Exchange (NYSE) or the NASDAQ stock exchange (NASDAQ). We verified the data carefully, in particular, for confounding events (such as dividend payments, replacement of the CEO, and so on, as recommended by McWilliams and Siegel, 1997), and for accuracy of the M&A announcement date, using *Lexis-Nexis*—a source that provides broad coverage of corporate events and announcements, and is commonly used for this purpose (e.g., Whittington, Yakis-Douglas, and Ahn, 2016). We thus gathered complete and verified information on the announcements of 1,241 M&A deals occurring between 1980 and 2009.<sup>2</sup>

## Dependent variables

To calculate the dependent variables, we followed the procedure developed in the finance literature (e.g., Berkovitch and Narayanan, 1993; Bradley, Desai, and Kim, 1988; Malatesta, 1983), and since used in strategy and international business research (e.g., Kumar, 2010; Seth *et al.*, 2000, 2002), that addresses value creation and how much of this value each of the parties in inter-organizational settings obtain. We first used event study methodology to calculate the respective abnormal returns of the acquirer and target firms upon the announcement of the acquisition. Event studies have been widely used in finance and strategic management as they are particularly suitable to capture the value implications of investment decisions (Anand and Khanna, 2000; Kale, Dyer, and Singh, 2002; Park, 2004). Abnormal returns measure performance implications of an M&A as they can be anticipated in

a near-instantaneous measurement window (e.g., Campbell, Lo, and MacKinlay, 1997; Fama *et al.*, 1969). Such an event-centered measurement is crucial for our purpose as we look at the value obtained not only by the acquirer, but also by the owners of the target firm that ceases to exist as a separate entity after the M&A.<sup>3</sup>

Specifically, we calculated cumulative abnormal returns (CARs) using the market model with a 250-day estimation window and a 21-day event window centered on the event date.<sup>4</sup> This is consistent with prior studies of the value implications of M&As (e.g., Seth *et al.*, 2000, 2002). We then verified the robustness of the results with shorter event windows.<sup>5</sup>

The CARs, as expressed in percentage terms of the firm's total market value, cannot simply be combined to calculate the total value that is created upon the announcement of the acquisition, which we need as a control variable in our models; nor can they be used to test our hypotheses and compare the value obtained by the acquirer with that obtained by the target as acquirers and targets may differ considerably in size.<sup>6</sup> This is resolved by using

<sup>3</sup> When the acquisition is agreed, returns from the deal accrue to the acquirer's shareholders (the acquirer, in short) and the target's shareholders (the target, in short) separately. This is the point when the size and distribution of returns for both parties can be assessed simultaneously. *Ex post* accounting measures, such as ROA, or subjective retrospective evaluations would not allow us to test our hypotheses as these deal with the value obtained separately by each party. Hence, for our specific research question, using stock market returns is the most compelling approach (see also Seth, 1990a, 1990b; Seth *et al.*, 2000, 2002; Kumar, 2010).

<sup>4</sup> There is a trade-off between two issues when choosing an event window: On one hand, a shorter event window might not capture the effects of potential information leakage prior to the event date or gradual diffusion of information after the event. On the other hand, a longer event window increases the likelihood of contamination from any confounding effects during the event window. As mentioned above, we carefully checked for any confounding effects during the event window to deal with the latter issue. To deal with the former issue, we used a conservative event window in our main analysis that covers 21 trading days around the event ( $-10, +10$ ). As discussed next, we verified the results using multiple event windows to ensure that the results are not dependent on any particular assumptions about information disclosure to the market.

<sup>5</sup> Specifically, following, for example, Westphal and Zajac (1998), we checked the robustness of the results when using 11-day ( $-5, +5$ ) and 7-day ( $-3, +3$ ) event windows surrounding the event date. This yielded significant results that are consistent with our hypotheses and similar with the main results.

<sup>6</sup> This is illustrated as follows: The impact of relatedness between acquirer and target has received considerable attention in the M&A literature, with higher relatedness generally expected to have a positive impact on the amount of synergies that are achieved, that is, value creation. Suppose that two M&A deals

<sup>2</sup> The 1,241 M&A deals are complete M&As, and thereby, exclude leveraged buyouts, spinoffs, recapitalizations, self-tenders, repurchases, acquisitions of remaining interests, privatizations, minority stake offers, and so on. Our final sample might appear somewhat smaller than that of some studies using the same data sources (e.g., Carow, Heron, and Saxton, 2004). However, these studies generally focus on the acquirer and do not require targets that are stock listed. Taking this in consideration, our sample is otherwise comparable to those used in other studies.

absolute amounts of the value created, expressed in U.S. dollars, instead of relative cumulative abnormal returns expressed as percentages (Berkovitch and Narayanan, 1993; Seth *et al.*, 2000, 2002).

Therefore, in a second step, we calculated the total value associated with the announcement of the acquisition in absolute terms. This equals the sum of the values accruing in U.S. dollars to the acquirer and the target. The value created by the acquirer can be calculated by multiplying its pre-announcement market value by the CARs to the acquirer during the event window. The target's value created can be calculated in an identical way using target-side pre-announcement market value and CARs. Hence, the total value created upon announcement of the acquisition can be expressed as (Berkovitch and Narayanan, 1993; Seth *et al.*, 2000):

$$\text{Total Value Created} = \text{Value Captured}_A + \\ \text{Value Captured}_T = S_{-11}^A P_{-11}^A \sum_{i=-10}^{i=10} AR_i^A + S_{-11}^T P_{-11}^T \\ \sum_{i=-10}^{i=10} AR_i^T,$$

where  $A$  is the acquirer and  $T$  is the target firm,  $S_{-11}$  is the number of shares on day -11,  $P_{-11}$  is the share price on day -11, and  $\sum_{i=-10}^{i=10} AR_i$  are the cumulative abnormal returns during the [-10, 10] event window.

only differ in terms of how related the parties are and of the market value of the respective acquirers: Acquirer 1 (in Deal 1) has a market value of \$800 million and Acquirer 2 (in Deal 2) has a market value of \$100 million. The parties in Deal 1 are twice as related as the parties in Deal 2, such that twice the amount of absolute synergies is created in Deal 1 than in Deal 2: \$100 million worth of synergies are achieved in Deal 1 and \$50 million worth of synergies, in Deal 2. Further, assume (for illustration purposes) that all the value created goes to the acquirer. Therefore, Acquirer 1 would see its value increase by twice as much as Acquirer 2 (\$100 million versus \$50 million). From this scenario, we would, as expected, infer that a positive relationship exists between how much value the acquirer obtains and the level of relatedness between the parties. However, if we used percentage returns instead, we would come to the opposite and incorrect conclusion, as Acquirer 1 appears to benefit less (a 12.5% increase in value) in percentage terms than Acquirer 2 (a 50% increase in value). Using percentage returns and comparing firms based on percentage returns would be inappropriate in this example. Likewise, percentages would be inappropriate to test our predictions, which compare respective value obtained. Instead, absolute dollar returns are commonly used in both early M&A research (e.g., Malatesta, 1983; Singh and Montgomery, 1987) and more recent work (Goranova, Dharwadkar, and Brandes, 2010; Seth *et al.*, 2002), and for the same comparative purpose as ours.

To test our hypotheses, we need to compare the value obtained by the acquirer with that obtained by the target. Accordingly, we use, respectively, the first term (absolute amount obtained by the acquirer) and the second term (absolute amount obtained by the target) in the above equation as our dependent variables.<sup>7</sup> Since we aim to isolate effects of experience on respective value obtained, we control for the total amount of value created (the sum of the two terms in the above equation) in these models. Thus, we are able to measure what slice of the pie each party gets while controlling for the size of the pie (Seth *et al.*, 2000).

Insofar as our methods incorporate an event study, some standard questions of interpretation may arise. The main one is whether abnormal returns upon M&A announcement represent extra value for the party whose share price so moves. Because the stock market is involved, abnormal returns may be interpreted as value imputed by investors based on their perception of the announcement's implications (Zajac and Westphal, 2004). Nevertheless, we believe that returns upon announcement are especially indicative of realized value for the firms in our sample, for several reasons. We examine acquisitions of whole listed firms, which get completed. Such deals require agreement by the bulk of target shareholders, whose expected compensation for tendering their shares is directly affected by (and reflected in) the reaction upon announcement. The size and visibility of the listed targets also make it likely that reactions are indicative of the eventual value generated on the acquirer side during the deal's execution time-frame, although this relationship is less definite. (A separate question is whether the acquirer's returns may vary in the longer term, assuming we could measure the effect of the specific M&A without confounds. We make no claims about this. Our interest is in comparing the value accruing [or imputed] to acquirer versus target, which can only be done around deal announcement.)

Moreover, we study firms listed on the two largest U.S. stock markets, which are the most

<sup>7</sup> Testing our hypotheses is complicated by the fact that at least one of the parties in a given M&A deal may have negative returns upon announcement—as indeed is common (Morck *et al.*, 1990). As a result, a ratio of both parties' returns has no straightforward interpretation (Gulati and Wang, 2003). Therefore, we follow Seth *et al.*'s (2000) approach and use the amount of value the acquirer obtains and the amount of value the target obtains as two separate dependent variables.

reliably efficient anywhere at imputing value based on firm-specific information of the type of interest here (Morck, Yeung, and Yu, 2000). It remains that the event study approach assumes semi-strong market efficiency. Though sometimes a basis of dispute, this assumption is commonly shared in the strategy literature, in particular, in alliance and M&A studies (e.g., Anand and Khanna, 2000; Humphrey-Jenner, 2014; Kale *et al.*, 2002; McDonald, Westphal, and Graebner, 2008). It has been extensively examined and validated in the finance literature (Campbell *et al.*, 1997; Fama, 1991).

## Independent variables

### *M&A experience difference (Hypotheses 1a–b, 2, and 3)*

We measured the M&A experience of the acquirer as the count of all M&As that the firm completed during the 10 years preceding the focal M&A. We then subtracted the target's M&A experience, measured likewise, from the acquirer's M&A experience to measure the difference in experience between the parties. This variable takes positive values if the acquirer's experience exceeds that of the target and negative values if the target's experience exceeds that of the acquirer. We verified our results with several specifications of the experience variables.<sup>8</sup>

### *Target product-market scope (Hypothesis 2)*

We measured the target's product-market scope as the number of four-digit SIC codes in which it operated at the time of the acquisition. This variable is commonly used in studies of the effects of product-market scope in M&As (e.g., Barkema and Schijven, 2008b).<sup>9</sup>

<sup>8</sup> We used multiple alternative specifications of the experience measures to check the robustness of our findings. First, we used multiple measurement windows to construct experience variables, ranging from an unlimited window to a four-year window. Second, we checked the robustness of the results when discounting older experience to compensate for the decay of experience over time. Following Ingram and Baum (1997), we examined 30, 20, and 10 percent discount rates. Third, as several studies have assumed decreasing marginal returns to experience (Barkema and Schijven, 2008b), we ran models using ln-transformed experience measures. All these alternative specifications yielded results consistent with those reported in the main analysis, which we deem appropriate given that such M&As are not trivial events.

<sup>9</sup> We tested the robustness of the results using measures based on two-digit and three-digit SIC codes, and again found support for all hypotheses.

### *Friendly deal attitude (Hypothesis 3)*

We measured whether the deal was friendly or not using a dummy variable coded 1 if the deal was reported as friendly in SDC, and 0 otherwise. This measure has frequently been used in M&A studies (e.g., Halebian and Finkelstein, 1999).

## Control variables

We controlled for factors at both the target and the acquirer levels as well as at deal and year levels, which may influence the amount of value created upon announcement, or how much each party receives. First, we controlled for initial *profitability* using the return on equity of each party in the year prior to the focal deal. Second, we controlled for the acquirer and target's *absolute sizes* using their respective assets (in millions of U.S. dollars). Third, we controlled for intangible resources using *Tobin's Q*, approximated by each firm's market-to-book ratio. Fourth, we controlled for the level of *industry concentration* in the acquirer and target's respective primary industries (at the four-digit level, based on *Census of Manufacturers* data).<sup>10</sup> Fifth, to capture any differences attributable to the *stock exchange* on which the acquirer and target were listed, we added two dummies identifying whether the target and acquirer, respectively, were listed on the NYSE (1) or NASDAQ (0). Sixth, we controlled for the *relative size* of the parties as the ratio of the acquirer's number of employees to the target's number of employees. Seventh, we controlled for *relatedness* between acquirer and target with a dummy equaling 1 when both parties were active in the same 2-digit SIC code, and 0 otherwise.<sup>11</sup> Eighth, we controlled for the *number of bidders* as the price of the target is often bid up when there are multiple bidders. Ninth, we controlled for the *value of the transaction* using the total amount (in millions of U.S. dollars) paid by the acquirer for the target, excluding fees and expenses.<sup>12</sup> Tenth, we controlled for the *method of*

<sup>10</sup> In line with previous M&A research, we used the four-firm concentration ratio, but results remain robust when using alternatives such as 8-firm, 20-firm, and 50-firm concentration ratios.

<sup>11</sup> Measures based on three-digit and four-digit SIC codes yielded similar results.

<sup>12</sup> Instead of controlling for the value of the transaction, we also explored models controlling for the premium paid by the acquirer for the target. We measured the acquisition premium as the acquirer's bid minus the target's pre-announcement value divided by the target's pre-announcement market value. This yielded results that are consistent with the main analysis and supportive

payment with dummy variables coded, respectively, 1 if a cash offer was made, and 0 otherwise, and 1 if stock was used to fund the deal, and 0 otherwise. Both dummies took the value 1 when a hybrid payment of cash and stock was used. Eleventh, since Hypothesis 2 involves target scope, we controlled for the acquirer's *product-market scope* as the number of four-digit SIC industries that it operated in. Twelfth, we included *year fixed effects* for the year in which each focal M&A was announced.<sup>13</sup> Finally, in the identifying equation in which we explain the total amount of value created, in the first stage of 3SLS analyses (see details of estimation approach below), we controlled separately for the acquirer and the target's respective prior M&A experience. This is consistent with the literature on value creation, while also allowing us to identify the models.

### Model specification

As discussed above, we study how much value each party obtains, controlling for the total amount of value created. However, previous research implies that the total amount of value created is endogenous. To account for this, we used 3SLS, which is asymptotically more efficient than 2SLS. One important additional benefit of the 3SLS approach (also compared to IV regression) is that it avoids the difficult selection of instrumental variables; identification alone is sufficient (Greene, 2012).<sup>14</sup> As mentioned above, we used separate experience measures to identify the models. Other identification

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of our hypotheses, however, the acquisition premium variable was not significant ( $p$ -value > 0.700) in any model, while the coefficients of the value of the transaction variable are significant ( $p$ -value = 0.001) in all models. Thus, we deem the value of the transaction more suitable as a control for the amount the acquirer paid for the target.

<sup>13</sup> Although we included several industry-level control variables in the models, we also examined models with industry effects for the acquirer's or the target's main industries. Since both parties have the same primary industry in about 70 percent of cases, controlling for both parties' primary industry simultaneously causes collinearity with sharp sample or variable loss. The literature does not inform us whether it is more desirable to control for the acquirer's or the target's industry. Therefore, we tested the robustness of the results by adding acquirer and target industry effects in separate models. Neither approach changed the results in any substantive way.

<sup>14</sup> Instead of a potentially problematic instrumental variable, the 3SLS technique uses all exogenous variables in the model to create a combined variable that acts as the "best instrument" (Kennedy, 2006).

approaches, including one where we excluded non-significant variables in each equation, yielded similar results. We also used OLS regression to confirm the robustness of the findings.

## RESULTS

Descriptive statistics and pairwise correlations can be found in Tables 1 and 2. They are in line with similar studies (e.g., Finkelstein and Haleblian, 2002; McNamara, Haleblian, and Dykes, 2008; Seth *et al.*, 2000, 2002). In Table 1, the mean total value created (combining acquirer and target effects) is negative (-\$31.84 million), meaning a decrease in the combined value of the firms of 0.7 percent relative to pre-offer value. Approximately 49 percent of deals create value, while 51 percent destroy value. The value obtained by the acquirer averages -\$107.72 million, while that for the target firm averages \$75.88. Consistent with this, 35.9 percent of acquirers earn positive returns versus 85.9 percent of targets.

In Hypotheses 1a and 1b, we argue that the respective value obtained by acquirer and target firms depends on the difference in their M&A experience. As discussed above, to test these hypotheses, we look separately at the value obtained by the acquirer and that obtained by the target (see also Seth *et al.*, 2000). Results are reported in Table 3. In models with the amount of value obtained by the acquirer as the dependent variable (Models 1, 2, and 3), positive experience difference coefficients mean that the acquirer obtains more value (at the expense of the target) when its experience is larger relative to the target's. Conversely, in models with the amount of value obtained by the target as dependent variable (Models 4, 5, and 6), negative experience difference coefficients imply that the target obtains more value (at the expense of the acquirer) if its experience advantage is larger.

All coefficients but one remain the same in magnitude, but reverse sign when we change the dependent variable from value obtained by the acquirer to value obtained by the target. This is because, given that we control for total value created, the respective models represent a zero-sum situation where for every dollar that is obtained by the acquirer, the target loses the same amount from the total value created. Only the coefficient of total value created changes in magnitude when we change the dependent variables in these models.

Table 1. Statistics about absolute amounts of value obtained and cumulative abnormal returns

Variables	Mean	Std. dev.
Acquirer's Value Obtained (m\$)	-107.72	639.71
Acquirer's Value Obtained as a % of the Pre-offer Value of the Acquirer Firm (CARs)	-3.5%	9.7%
Target's Value Obtained (m\$)	75.88	212.58
Target's Value Obtained as a % of the Pre-offer Value of the Target Firm (CARs)	18.3%	20.7%
Total Value Created (or Destroyed) (m\$)	-31.84	647.90
Total Value Created/Destroyed as a % of the Pre-offer Value of Both Firms Combined	-0.7%	8.8%
% of Deals where Acquirer Obtains Positive Value	35.9%	
% of Deals where Target Obtains Positive Value	85.9%	
% of Deals that Create Positive Total Value	49.4%	

This coefficient indicates the relationship between the value the focal party obtains and total value created. A higher value of this variable implies that a party obtains more of the value created.

In Model 1, we find a positive relationship between the M&A Experience Difference variable and the amount of value obtained by the acquirer ( $p$ -value = 0.001). Hence, the more experience an acquirer has compared to its target, the more value the acquirer obtains. This is consistent with Hypothesis 1a. Consistent with Hypothesis 1b, we find in Model 4 a negative relationship ( $p$ -value = 0.001) between M&A Experience Difference and the value obtained by the acquirer; that is, the more experience a target has compared to its acquirer, the more value the target obtains.

In terms of practical magnitudes and economic effects, a firm whose experience exceeds that of the other party by one standard deviation's worth of the M&A experience differential will see the amount of value it obtains increase by approximately \$21 million on average. This represents an increase of 1.3 percent over the pre-deal value for the median acquiring firm and 12.8 percent over the pre-deal value for the median target. In absolute, a one-unit change in the M&A experience differential allows the advantaged party to obtain approximately an extra \$2.7 million. Hence, the experience advantage effect we uncover is both statistically and practically significant.

In Model 2, we find that the interaction term between M&A Experience Difference and Target Product-Market Scope has a positive and statistically significant effect ( $p$ -value = 0.049) on how much value the acquirer obtains. Similarly, in Model 5, we find a negative and significant ( $p$ -value = 0.049) effect of this interaction term on how much value the target obtains. These results are

consistent with Hypothesis 2. Finally, the interaction term between M&A Experience Difference and Friendly Deal Attitude has a negative and significant effect ( $p$ -value = 0.091) on how much value the acquirer obtains (Model 3). Consistent with this, we find a positive interaction effect ( $p$ -value = 0.091) in Model 6 where we look at how much value the target obtains. These results offer support for Hypothesis 3.

Examination of the practical magnitudes of the hypothesized moderating effects confirms the above inferences, but in terms of economic significance. Specifically, the marginal effect of a unit change in M&A experience differential is approximately \$27 million higher when the deal is not friendly compared to when it is friendly. Similarly, the marginal effect of a one-unit change in M&A experience differential is approximately \$1.7 million higher when the target's level of diversification is one standard deviation above the mean compared to when its one standard deviation below the mean.

To verify the results, we used an alternative dependent variable, which captures the difference between the absolute value obtained by the acquirer and that obtained by the target. This yielded results consistent with the main analysis and supportive of our hypotheses. Specifically, we find a positive and significant relationship ( $p$ -value = 0.001) between Value Difference (Acquirer value obtained – Target value obtained) and M&A Experience Difference (Acquirer M&A experience – Target M&A experience). This is consistent with Hypothesis 1. Furthermore, the interaction term between M&A Experience Difference and Target Product-Market Scope has a positive and statistically significant effect ( $p$ -value = 0.049) on value difference. Finally, the interaction term between M&A Experience Difference and Friendly Deal Attitude

Table 2. Descriptive statistics and correlations (N = 1,241)

Variables	Mean	St. dev.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1 Acquirer's Value Obtained (m\$)	-107.72	639.71																						
2 Target's Value Obtained (m\$)	75.88	212.58	-0.13																					
3 Acquirer Profitability	10.29	17.53	0.01	0.08																				
4 Target Profitability	3.87	22.66	-0.02	0.15	0.24																			
5 Acquirer Size	11.50	37.75	-0.27	0.18	0.07	0.06																		
6 Target Size	1.65	6.33	-0.07	0.40	0.02	0.02	0.29																	
7 Acquirer Tobin's Q	2.52	3.53	-0.03	-0.01	0.08	-0.05	-0.05	0.06																
8 Target Tobin's Q	2.70	6.05	-0.07	0.10	0.01	0.00	-0.02	-0.03	0.10															
9 Acquirer Industry Concentration	40.95	20.11	-0.01	0.06	0.04	-0.01	0.03	0.02	-0.01	0.02														
10 Target Industry Concentration	40.06	20.26	0.02	0.08	0.06	0.04	0.07	0.04	0.07	-0.01	0.37													
11 Acquirer NYSE Listed	0.60	0.49	-0.01	0.15	0.21	0.14	0.17	0.12	-0.01	-0.04	-0.05	-0.06												
12 Target NYSE Listed	0.43	0.49	-0.06	0.17	0.09	0.12	0.04	0.17	-0.09	-0.04	-0.11	-0.12	0.42											
13 Relative Size	24.33	96.91	-0.01	-0.02	0.10	-0.01	0.09	-0.04	0.02	0.00	-0.01	0.00	0.12	-0.02										
14 Related M&A	0.72	0.45	0.04	-0.01	-0.04	-0.01	-0.04	0.04	-0.01	0.00	0.00	0.00	0.03	0.00	0.01	-0.09								
15 Number of bidders	1.04	0.26	0.02	-0.04	-0.02	0.02	-0.03	0.00	-0.02	-0.04	0.03	0.02	-0.02	0.05	-0.03	0.02								
16 Value of the Transaction	803.86	1887.37	-0.31	0.60	0.05	0.15	0.22	0.49	-0.04	0.07	0.55	0.05	0.20	0.23	-0.03	-0.01	0.02							
17 Debt Funded Deal	0.12	0.32	-0.02	0.12	0.06	0.08	-0.06	0.01	0.00	-0.01	0.03	0.03	0.13	0.19	-0.05	-0.03	0.00	0.13						
18 Stock Funded Deal	0.01	0.12	-0.02	-0.01	0.04	0.01	-0.01	-0.01	-0.01	-0.03	-0.03	0.01	0.04	0.04	0.00	-0.02	0.04	0.00	-0.11	0.02	-0.02	0.01	0.21	
19 Total Value Created	-31.84	647.90	0.95	0.20	0.04	0.03	-0.21	0.07	-0.03	-0.03	0.01	0.12	0.09	0.28	0.10	-0.13	0.03	0.14	0.05	-0.04	0.05			
20 Acquirer Product-market Scope	4.09	3.11	-0.01	0.19	0.13	0.06	0.13	0.05	0.02	0.00	0.12	0.09	0.28	0.10	0.10	-0.13	0.03	0.14	0.05	-0.04	0.05			
21 Target Product-market Scope	2.62	1.97	-0.01	0.28	0.07	0.05	0.05	0.14	-0.02	-0.02	0.07	0.06	0.15	0.14	-0.05	-0.12	0.03	0.25	0.19	-0.02	0.08	0.25		
22 Friendly Attitude Difference (acquirer-target)	0.99	0.08	-0.01	-0.06	-0.03	-0.05	0.01	-0.05	0.01	0.02	-0.06	-0.04	-0.05	0.02	-0.03	-0.21	-0.08	-0.03	-0.07	-0.03	0.13	0.15	-0.01	-0.05
23 M&A Experience Difference	4.29	7.82	0.13	-0.02	0.09	0.01	0.14	-0.02	0.06	-0.01	0.04	0.01	0.11	-0.10	0.15	0.02	-0.05	-0.02	-0.05	-0.03	0.13	0.15	-0.01	-0.01

Table 3. Determinants of value obtained by acquirer and target

	Dependent variable: Acquirer Value Obtained					
	Model 1		Model 2		Model 3	
<b>Constant</b>	<b>-15.761</b>		<b>-24.312</b>		<b>7.684</b>	
	(105.107)	[0.881]	(103.792)	[0.815]	(86.516)	[0.929]
<b>Acquirer Profitability</b>	<b>-0.129</b>		<b>-0.120</b>		<b>-0.130</b>	
	(0.278)	[0.644]	(0.275)	[0.664]	(0.278)	[0.640]
<b>Target Profitability</b>	<b>-0.283</b>		<b>-0.288</b>		<b>-0.297</b>	
	(0.222)	[0.203]	(0.219)	[0.190]	(0.223)	[0.182]
<b>Acquirer Size</b>	<b>-0.931</b>		<b>-0.889</b>		<b>-0.934</b>	
	(0.244)	[0.000]	(0.236)	[0.000]	(0.243)	[0.000]
<b>Target Size</b>	<b>-1.296</b>		<b>-1.518</b>		<b>-1.357</b>	
	(1.330)	[0.330]	(1.291)	[0.240]	(1.334)	[0.309]
<b>Acquirer Tobin's Q</b>	<b>-2.062</b>		<b>-2.013</b>		<b>-2.038</b>	
	(1.350)	[0.127]	(1.332)	[0.131]	(1.350)	[0.131]
<b>Target Tobin's Q</b>	<b>-2.703</b>		<b>-2.747</b>		<b>-2.743</b>	
	(0.759)	[0.000]	(0.751)	[0.000]	(0.759)	[0.000]
<b>Acquirer Industry Concentration</b>	<b>-0.137</b>		<b>-0.135</b>		<b>-0.138</b>	
	(0.251)	[0.586]	(0.248)	[0.588]	(0.251)	[0.583]
<b>Target Industry Concentration</b>	<b>-0.216</b>		<b>-0.217</b>		<b>-0.201</b>	
	(0.255)	[0.396]	(0.252)	[0.389]	(0.255)	[0.429]
<b>Acquirer NYSE Listed</b>	<b>27.782</b>		<b>27.515</b>		<b>28.148</b>	
	(11.715)	[0.018]	(11.564)	[0.017]	(11.704)	[0.016]
<b>Target NYSE Listed</b>	<b>-12.966</b>		<b>-13.662</b>		<b>-12.520</b>	
	(14.073)	[0.357]	(13.888)	[0.325]	(14.062)	[0.373]
<b>Relative Size</b>	<b>-0.043</b>		<b>-0.040</b>		<b>-0.042</b>	
	(0.049)	[0.378]	(0.048)	[0.412]	(0.049)	[0.386]
<b>Related M&amp;A</b>	<b>-5.235</b>		<b>-4.788</b>		<b>-5.558</b>	
	(10.492)	[0.618]	(10.378)	[0.645]	(10.493)	[0.596]
<b>Number of Bidders</b>	<b>50.326</b>		<b>49.634</b>		<b>56.353</b>	
	(18.573)	[0.007]	(18.349)	[0.007]	(18.882)	[0.003]
<b>Value of the Transaction</b>	<b>-0.064</b>		<b>-0.063</b>		<b>-0.063</b>	
	(0.005)	[0.000]	(0.005)	[0.000]	(0.005)	[0.000]
<b>Debt Funded Deal</b>	<b>-23.890</b>		<b>-23.357</b>		<b>-23.125</b>	
	(15.440)	[0.122]	(15.255)	[0.126]	(15.442)	[0.134]
<b>Stock Funded Deal</b>	<b>17.514</b>		<b>18.521</b>		<b>16.496</b>	
	(39.414)	[0.657]	(38.930)	[0.634]	(39.394)	[0.675]
<b>Total Value Created</b>	<b>0.834</b>		<b>0.842</b>		<b>0.834</b>	
	(0.042)	[0.000]	(0.041)	[0.000]	(0.042)	[0.000]
<b>Acquirer Product-Market Scope</b>	<b>-4.309</b>		<b>-4.430</b>		<b>-4.269</b>	
	(1.691)	[0.011]	(1.667)	[0.008]	(1.690)	[0.012]
<b>Target Product-Market Scope</b>	<b>-7.320</b>		<b>-6.704</b>		<b>-7.301</b>	
	(2.860)	[0.010]	(2.885)	[0.020]	(2.858)	[0.011]
<b>Friendly Attitude</b>	<b>19.526</b>		<b>21.227</b>		<b>39.712</b>	
	(55.676)	[0.726]	(54.986)	[0.699]	(57.117)	[0.487]
<b>H1 M&amp;A Experience Difference (acquirer - target)</b>	<b>2.732</b>		<b>2.514</b>		<b>2.905</b>	
	(0.805)	[0.001]	(0.780)	[0.001]	(0.801)	[0.000]
<b>H2 M&amp;A Experience Difference × Target Product-Market Scope</b>			<b>0.428</b>			
			(0.218)	[0.049]		
<b>H3 M&amp;A Experience Difference × Friendly Attitude</b>					<b>-27.487</b>	
					(16.264)	[0.091]
<b>Year Fixed Effects</b>	Included		Included		Included	
<b>Nobs</b>	1,241		1,241		1,241	
<b>R-squared</b>	0.94		0.94		0.94	
<b>Chi-squared</b>	4967.6	[0.000]	5166.48	[0.000]	4973.2	[0.000]

Table 3. Continued

	Dependent variable: Target Value Obtained					
	Model 4		Model 5		Model 6	
	Coef.	t-value	Coef.	t-value	Coef.	t-value
Constant	<b>15.761</b>	(105.107)	<b>24.312</b>	(103.792)	<b>7.684</b>	(86.516)
Acquirer Profitability	<b>0.129</b>	(0.278)	<b>0.120</b>	(0.275)	<b>0.130</b>	(0.278)
Target Profitability	<b>0.283</b>	(0.222)	<b>0.288</b>	(0.219)	<b>0.297</b>	(0.223)
Acquirer Size	<b>0.931</b>	(0.244)	<b>0.889</b>	(0.236)	<b>0.934</b>	(0.243)
Target Size	<b>1.296</b>	(1.330)	<b>1.518</b>	(1.291)	<b>1.357</b>	(1.334)
Acquirer Tobin's Q	<b>2.062</b>	(1.350)	<b>2.013</b>	(1.332)	<b>2.038</b>	(1.350)
Target Tobin's Q	<b>2.703</b>	(0.759)	<b>2.747</b>	(0.751)	<b>2.743</b>	(0.759)
Acquirer Industry Concentration	<b>0.137</b>	(0.251)	<b>0.135</b>	(0.248)	<b>0.138</b>	(0.251)
Target Industry Concentration	<b>0.216</b>	(0.255)	<b>0.217</b>	(0.252)	<b>0.201</b>	(0.255)
Acquirer NYSE Listed	<b>-27.782</b>	(11.715)	<b>-27.515</b>	(11.564)	<b>-28.148</b>	(11.704)
Target NYSE Listed	<b>12.966</b>	(14.073)	<b>13.662</b>	(13.888)	<b>12.520</b>	(14.062)
Relative Size	<b>0.043</b>	(0.049)	<b>0.040</b>	(0.048)	<b>0.042</b>	(0.049)
Related M&A	<b>5.235</b>	(10.492)	<b>4.788</b>	(10.378)	<b>5.558</b>	(10.493)
Number of Bidders	<b>-50.326</b>	(18.573)	<b>-49.634</b>	(18.349)	<b>-56.353</b>	(18.882)
Value of the Transaction	<b>0.064</b>	(0.005)	<b>0.063</b>	(0.005)	<b>0.063</b>	(0.005)
Debt Funded Deal	<b>23.890</b>	(15.440)	<b>23.357</b>	(15.255)	<b>23.125</b>	(15.442)
Stock Funded Deal	<b>-17.514</b>	(39.414)	<b>-18.521</b>	(38.930)	<b>-16.496</b>	(39.394)
Total Value Created	<b>0.166</b>	(0.042)	<b>0.158</b>	(0.041)	<b>0.166</b>	(0.042)
Acquirer Product-Market Scope	<b>4.309</b>	(1.691)	<b>4.430</b>	(1.667)	<b>4.269</b>	(1.690)
Target Product-Market Scope	<b>7.320</b>	(2.860)	<b>6.704</b>	(2.885)	<b>7.301</b>	(2.858)
Friendly Attitude	<b>-19.526</b>	(55.676)	<b>-21.227</b>	(54.986)	<b>-39.712</b>	(57.117)
H1 M&A Experience Difference (acquirer - target)	<b>-2.732</b>	(0.805)	<b>-2.514</b>	(0.780)	<b>-2.905</b>	(0.801)
H2 M&A Experience Difference × Target Product-Market Scope			<b>-0.428</b>	(0.218)	<b>27.487</b>	(0.049)
H3 M&A Experience Difference × Friendly Attitude						(16.264)
Year Fixed Effects	Included		Included		Included	
Nobs	1241		1241		1241	
R-squared	0.49		0.46		0.45	
Chi-squared	968.2	[0.000]	992.27	[0.000]	974.3	[0.000]

Estimated coefficients are in bold. Standard errors are in parentheses. *P*-values are between square brackets. All tests are two tailed. In the models with interaction terms, we used mean-centered first order terms to calculate the interactions terms. The first-stage equation in the 3SLS model that explains the Total Value Created includes the following variables: Acquirer Profitability, Target Profitability (-) [0.046], Acquirer Size (-) [0.000], Target Size (+) [0.000], Acquirer Tobin's Q, Target Tobin's Q, Acquirer Industry Concentration, Target Industry Concentration, Acquirer Product Scope, Target Product-Market Scope (+) [0.027], Acquirer NYSE Listed, Target NYSE Listed, Relative Size, Related M&A, Number of bidders, Friendly Attitude, Value of the Transaction (-) [0.000], Debt Funded Deal, Stock Funded Deal, Acquirer's M&A Experience (+) [0.000], and Target's M&A Experience (+) [0.000] (variables underlined are significant with *p*-values reported between squared brackets and the direction of the effect indicated between parentheses). Detailed results are available from the authors on request.

is negative and significant ( $p$ -value = 0.091). Economic magnitudes are also confirmed.

## DISCUSSION

We seek to examine the role of both the acquirer's and target's experience in explaining how the value created in an M&A deal accrues to the acquirer and target. The findings support our main argument that value obtained is an outcome of a distributive process in which both acquirer and target play an active role, such that differential experience is a key determinant of which one obtains how much value. The findings also show that the impact of this experience advantage is contingent on the level of information asymmetry imposed by the target's scope, and on whether the parties reach a friendly agreement. That is, the respective value obtained by acquirer and target depends on whether the target knows better, or at least more—both about M&As (experience differential) and about itself (information asymmetry).

Our study makes several contributions to strategy research. First, we contribute to the M&A literature by improving the understanding of acquirer versus target returns in M&As. This issue is relatively unexplored, yet it is critical if we are to understand fully why and how various firms benefit or fail to benefit from M&A deals. In addition, past studies found effects of various target characteristics (e.g., the target's product-market scope, public status, and size) on value creation; however, many of these studies focus on the acquirer more than on the target, if not exclusively on the acquirer. Our findings suggest a more active role for the target than is commonly attributed to them when it comes to M&A performance. This role becomes more visible and is essential when it comes to appropriating value. In addition, we show that the target's past decisions (i.e., regarding its product-market scope) and its decisions during the acquisition process (i.e., whether to approach it as a friendly deal) are important contingencies on the effect of differential experience on respective value obtained.

Second, we contribute to the research on organizational learning and synthesize it with the literature on bargaining and negotiation. Prior studies have offered valuable insights into how experience helps the development of an acquisition capability that helps firms to create value. We highlight that experience can lead to the creation of a capability

that helps with another important M&A issue, that is, value capturing, plausibly through improved bargaining and negotiation skills. In addition, studies in this literature have mostly considered theoretically one party's experience, typically the acquirer's, or (more seldom) both parties' experience but in isolation of each other. We find an interesting interdependency between both parties' experience and highlight the importance of considering *differential* experience, as the source of *experience advantage*.

Third, our findings further the potential of using information economics in strategic management research. Information economics previously proved a fruitful theoretical approach to look at issues such as governance choice and partner selection (e.g., Balakrishnan and Koza, 1993; Reuer and Ragozzino, 2012). As shown here, it is also valuable in explaining performance outcomes. We also show that targets can better use information asymmetry to their advantage when they have an experience advantage, while acquirers with an experience advantage are in a better position to overcome this information asymmetry and capture a larger slice of the pie.

We also note several potential limitations of this study and opportunities for future research. First, we study domestic M&As in one country with high levels of M&A activity, the United States. It would be interesting to verify results in other national, and especially, cross-border settings where bargaining might be different and additional sources of information asymmetry might be present. Second, we look at direct M&A experience. Future studies could examine other forms of learning (e.g., Martin and Salomon, 2003; Salomon and Martin, 2008). Such effects would be interesting to study in other external corporate development activities too (e.g., Cuypers and Martin, 2010; van den Oever and Martin, 2015). Third, we use event study methodology to determine how much value is imputed to each party upon announcement. Since the target ceases to exist as a stand-alone entity after the deal is completed, this approach uniquely allows us to compare the value obtained by the acquirer with that obtained by the target. Still, future research could explore long-term performance implications for the acquirer using accounting measures, such as ROA, or subjective *ex-post* evaluations. Finally, more practically, it would be interesting to examine how acquirer-side managers consider their own versus the other party's experience when selecting and valuing acquisition targets. Specifically, future

studies could examine the experience effects of potential acquirers and targets, via experience advantage, on the likelihood of an acquisition materializing between two parties and on which party is the acquirer. Conditions for experience advantage or even disadvantage also warrant further study (see Ghosh *et al.*, 2014). Notwithstanding these limitations and avenues for future research, this study increases the understanding of the respective roles of acquirer and target in M&As, and of how much value each obtains as a function of experience and information asymmetries.

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