ANCHORING ON THE ACQUISITION PREMIUM DECISIONS OF OTHERS

SHAVIN MALHOTRA,1 PENGCHENG ZHU,2 and TACO H. REUS3
1 Global Management Studies Department, Ted Rogers School of Management, Ryerson University, Toronto, Ontario, Canada
2 Department of Finance, School of Business Administration, University of San Diego, San Diego, California, U.S.A.
3 Department of Business Society Management, Rotterdam School of Management (RSM), Erasmus University Rotterdam, Rotterdam, The Netherlands

Anchoring is a ubiquitous heuristic by which decision makers heavily rely on a piece of information (anchor) that appears prior to a decision. Yet, we know little about its role in strategic decisions. This study considers its influence on acquisition premiums by examining whether a focal premium decision may be anchored on the premium that another firm paid for the acquisition that directly preceded the focal acquisition in the same market because it presents a salient and compatible premium to decision makers. Our results support this premise, particularly when preceding acquisitions happened more recently and were similar in size to the focal deals, when focal deals were in a foreign market, and when acquirers lacked acquisition experience in the target market or had a higher acquisition rate. Copyright © 2014 John Wiley & Sons, Ltd.

INTRODUCTION

Executives often highlight seemingly clear and lucrative synergies to explain acquisition premiums, but premium decisions are inherently uncertain. In general, higher premiums hinder performance (e.g., Haunschild, 1994), and often cannot be justified through rational synergy explanations (Laamanen, 2007; Sirower, 1997). Scholars therefore suggested that premium decisions are tainted by biases, such as overconfidence in realizing synergies (Hayward and Hambrick, 1997) and desperation for growth (Kim, Haleblian, and Finkelstein, 2011). Yet, the literature has insufficiently considered how uncertainty—i.e., when information needs exceed available information (e.g., Galbraith, 1977; Tversky and Kahneman, 1974)—influences these decisions.

Even though firms can collect much information on their targets, considerable uncertainty persists in acquisition premium decisions due to the complexity and secrecy of the task. Prior research highlights the roles of experiences of interorganizational partners (Haunschild, 1994), signaling by sellers (Reuer, Tong, and Wu, 2012), or group polarization on boards (Zhu, 2013) in mitigating this uncertainty. However, research on cognitive heuristics—mental shortcuts assisting decision making under uncertainty (Tversky and Kahneman, 1974)—in premium decisions remains limited (cf. Duhaime and Schwenk, 1985; Krug, 2009). This gap is important as there is general agreement that a fair amount of subjectivity goes into premium setting (Haspeslagh and Jemison, 1991; Rappaport and Sirower, 1999), and the process is “not nearly [as] analytical and segmented” (Haspeslagh and Jemison, 1991: 41).

Keywords: anchoring theory; mergers and acquisitions; acquisition premiums; strategic decision making; heuristics

*Correspondence to: Shavin Malhotra, Associate Professor, Global Management Studies Department, Ted Rogers School of Management, Ryerson University, 575 Bay Street, Toronto Ontario, M5G 2C5. E-mail: shavinm@ryerson.ca

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Managers often may use simplifying practices in arriving at premiums (cf. Duhaime and Schwenk, 1985; Krug, 2009), but we know little about them. To address this gap, we introduce a key theory in cognitive psychology—anchoring theory—to the premium literature.

Anchoring refers to relying heavily on a piece of information (the anchor) that appears before decision makers make a judgment (Tversky and Kahneman, 1974). People anchor through confirmatory searches: they selectively access and give priority to information that is consistent with an anchor (Chapman and Johnson, 1994; Strack and Mussweiler, 1997). As a result, the decision on a focal task is pulled toward the anchor. When people are constrained for time and information, anchoring offers a simple mechanism to deal with complex decisions. Yet, it also can lead people to underestimate or exclude relevant information about the focal event.

Whether a reference point becomes an anchor depends on its salience (Wilson et al., 1996) and compatibility with a focal task (Strack and Mussweiler, 1997). When deciding on a premium, decision makers and their advisors tend to make so-called precedent transaction analyses by which the acquisition made by another firm that preceded the focal deal in the market receives considerable attention. Apart from gaining insights from such analyses, following in the footsteps of others provides social proof of the focal decision makers’ actions (Rao, Greve, and Davis, 2001). In this process, the preceding acquisition premium paid by the other firm becomes a clearly salient and compatible number for the focal task, and a likely anchor candidate in a focal premium decision. We argue that, even if they are economically unconnected, preceding deals therefore likely exert a strong anchoring effect, particularly when they occurred more recently and were more similar in size to the focal deal (increasing salience and compatibility), focal deals were international (elevating uncertainty), and focal acquirers had less experience or a higher acquisition rate (influencing information search and time constraints).

Our contribution lies in introducing anchoring as a prominent cognitive heuristic in premium decisions. This perspective moves the acquisition premium literature beyond target, bidder, and focal deal characteristics stressed in extant research (Betton, Eckbo, and Thorburn, 2008), to direct attention to preceding deal characteristics that seem particularly relevant for managerial sensemaking in such decisions. We examine anchoring after carefully controlling for possible economic reasons (e.g., synergy, vicarious learning, and market effect), and applying a method—hedonic regression—that is new to the strategic management field. Our study responds to recent calls for more research into the psychological foundations of strategic firm behavior (Powell, Lovallo, and Fox, 2011) by developing an anchoring theory of premium decisions, and shedding light on an important cognitive heuristic to explain strategic behavior and decision making.

THEORY AND HYPOTHESES

Tversky and Kahneman (1974) introduced the anchoring-and-adjustment model explaining how people, under uncertain conditions, set an anchor and then make insufficient adjustments, so that their final estimate is closer to the anchor than it would be without the anchor. This early model required an explicit anchor that fell outside a range of acceptable answers. Reliance on experimental design meant that experimenters initiated the anchoring process by presenting an anchor. To avoid experimenter’s bias (subjects’ inclination to assume experimenters must be presenting relevant information), anchors were obviously uninformative, for example, by using part of a phone number as anchor for a year estimate (e.g., Russo and Shoemaker, 1989).

Over time, however, the requirements that anchors be explicitly presented and fall outside a range of acceptable answers received criticism—scholars indicated that an anchor can be given in a subliminal manner, and fall within a range of acceptable answers (Mussweiler and Englich, 2005; Mussweiler and Strack, 1999). In fact, plausible, albeit limitedly informative, anchors turned out to have a stronger influence on judgments than implausible anchors do (Chapman and Johnson, 1994). Plausible anchors are also more common in real-world settings (Epley and Gilovich, 2001). For example, in home buying, a plausible list price (anchor) affected real estate agents’ estimates (Northcraft and Neale, 1987), and, in auctions of paintings, judges anchored their decisions on a previous sale price (Beggs and Graddy, 2009).

This development made the selective-accessibility model, derived from confirmatory hypothesis testing (Chapman and Johnson, 1999; Strack
and Mussweiler, 1997), the dominant anchoring view (e.g., Furnham and Boo, 2011). It suggests that references falling outside a range of acceptable answers might be rejected quickly, while those that are salient and compatible with a focal task draw attention (Englich, Mussweiler, and Strack, 2006; Strack and Mussweiler, 1997). People begin a judgment with an initial anchor in mind, and then evaluate whether the anchor is a suitable answer. Assuming the answer is not suitable, people contemplate other estimates, but only after carefully considering many attributes of the anchor, stressing similarities rather than differences between the anchor and the task (Jacowitz and Kahnewman, 1995). Anchor-consistent information then becomes more accessible, and people rely on it more readily than on information that may be more pertinent to the focal task. As a result, the final estimate is pulled toward the anchor.

**Anchoring in acquisition premium decision making**

High uncertainty makes premium decision makers prone to anchoring. These decisions often take place in small teams, such as top management teams or boards (e.g., Zhu, 2013), and require considerable secrecy, as revelations could hinder negotiations. Although teams appear to have an advantage over individuals in making decisions because they can combine multiple perspectives, they actually do a poor job at pooling information held by individual members. Team decisions generally do not reflect collective knowledge because members tend to share very little information that is not already held in common (Davis, 1992; Zhu, 2013). Often, teams converge on a majority opinion—rather than relying on individual anchors, individual members tend to converge towards the anchor used by most members (e.g., Whyte and Sebenius, 1997). As a result, teams are just as susceptible to anchoring as individuals are (Rutledge, 1993).

As mentioned, the selective-accessibility model emphasizes that anchors are not only salient (i.e., attracting attention) and on a similar scale as the focal task (e.g., Chapman and Johnson, 1994) but also compatible on substantial dimensions to enhance confirmatory hypothesis testing (e.g., Strack and Mussweiler, 1997). In premium decisions, decision makers therefore may often anchor their decisions on another premium decision. While there may be various premiums that could be presented to decision makers, the premium paid for the acquisition that preceded the focal acquisition tends to attract particular attention, and is clearly compatible to the focal task.

Prior studies and personal interviews by one of the authors indicated that decision makers often reflect on preceding acquisitions and their premiums (e.g., Rappaport and Sirower, 1999), and M&A advisors perform precedent transaction analyses by which the preceding deal becomes a clearly compatible event (cf. Rosenbaum and Pearl, 2009). Premiums by other firms often receive more attention than past premium decisions by the focal acquirer itself considering only a fraction of acquirers have such experience (28.7% of our sample), and even fewer have experience in the focal market that is recent enough to receive sufficient attention (3.5% made a deal in the preceding year; 6% in the preceding two years).

Moreover, there are social cognitive reasons to expect that firms pay attention to these preceding premium decisions. The notion of information cascades explains that when uncertain decisions are made sequentially, decision makers pay attention to practices and actions by those who previously faced a comparable situation (e.g., Bikchandani, Hirshleifer, and Welch, 1998). Following the premium setting of a preceding acquirer provides a social proof—conforming to the actions of others provides a way to show what is believed to be correct behavior for the uncertain task (Rao et al., 2001). Considering that a market’s preceding deal is well known to target decision makers as well, it also provides social proof for them.

As such, a market’s preceding acquisition premium presents a particularly salient and compatible number. Following the selective-accessibility model of anchoring, decision makers then attempt to confirm the hypothesis that it would be a suitable answer for their own premium decision. They likely will consider it to be incorrect, but the conscious or unconscious tendency to stress anchor-target similarities, rather than differences, increases their reliance on information consistent with the preceding deal. As a result, focal premium estimates are pulled toward preceding acquisition premiums.

**Hypothesis 1**: A market’s preceding acquisition premium acts as an anchor for a focal acquisition premium.
While anchoring is ubiquitous, scholars have identified key factors that moderate its effect related to (1) the anchor, (2) the focal task, and (3) the decision makers (Furnham and Boo, 2011).

**Anchor recency and size similarity**

Not all preceding deals attract the same attention, and the extent of anchoring on preceding deals likely varies. First, information about more recent events is more readily available, making more recent events more salient (Bazerman and Moore, 2013). Hammond, Keeney, and Raiffa (1998) stress how more recent events become anchors in organizational decisions. For example, when evaluating subordinates, managers give more weight to recent events than to earlier events. In M&As, a more recent preceding deal provides decision makers easier access to impressions about the firms, the market, and investors’ responses to that deal. This higher salience makes it easier to generate anchor-consistent information about more recent deals (cf. Chapman and Johnson, 2002).

**Hypothesis 2:** Anchoring on a market’s preceding acquisition premium will be stronger for more recent preceding acquisition deals.

Second, preceding and focal deals vary in their similarity; with increased similarity, even superficially, anchors become more plausible (e.g., Mussweiler and Strack, 2000). Similarity between the preceding and focal deals will increase people’s attention to shared features, facilitating them to selectively generate information that compares favorably to the anchor. In contrast, less similar events are less likely to register as viable information, and prompt decision makers to attend to unique, rather than shared, features between the anchor and target (Epley and Gilovich, 2005).

Decision makers particularly may be influenced by size similarity when comparing characteristics. Deal size has been considered a proxy for deal complexity by some (Grinstein and Hribar, 2004) and integration challenges by others (Ellis et al., 2011). Because size is easy for outsiders to observe, decision makers also likely make social comparisons on the basis of size characteristics (cf. Greve, 2008). Similarity in deal size then increases decision makers’ belief that their focal deal is like the anchor deal and that there is broader similarity in their characteristics, performance drivers, and risks (cf. Rosenbaum and Pearl, 2009).

**Hypothesis 3:** Anchoring on a market’s preceding acquisition premium will be stronger when preceding and focal acquisitions are more similar in size.

**Focal task uncertainty: international acquisitions**

Research on heuristics stresses their influence in uncertain environments (Schwenk, 1984; Tversky and Kahneman, 1974). To deal with uncertainty, decision makers simplify practices in the form of heuristics (Simon, 1957). Thus, managers are more likely to resort to cognitive shortcuts under greater uncertainty, when available information is limited (Graffin, Boivie, and Carpenter, 2013; Zhu, 2013). Relevant to our study, international acquirers face considerably greater uncertainty than domestic acquirers due to cultural, economic, and institutional differences across countries (e.g., Reuer and Koza, 2000), liabilities of foreignness (Zaheer, 1995), and more information asymmetry between firms located in different countries (Roth and O’Donnel, 1996). International acquirers face greater difficulty accessing valuable information (e.g., Ragozzino and Reuer, 2011; Seth, Song, and Pettit, 2002), making them more prone to anchoring.

**Hypothesis 4:** Anchoring on a market’s preceding acquisition premium will be stronger for international acquirers than for domestic acquirers.

**Decision makers’ experience and acquisition rate**

Some scholars have found that experience increases anchoring, arguing that experts analyze more thereby accessing even more anchor-consistent information (e.g., Englich et al., 2006; Northcraft and Neale, 1987). Yet, others argue and find that experts anchor less because they consider more anchor-inconsistent information (e.g., Chapman and Johnson, 1994; Wilson et al., 1996). We argue that access to more anchor-inconsistent information, rather than anchor-consistent information, depends on the extent to which the experience is related to the focal task.
Acquisition scholars emphasize that the effect of experience depends on its relatedness to the focal task—related acquisition experience (acquisition experience in the focal market in our study) allows decision makers to transfer specific lessons to the focal deal (Ellis et al., 2011; Haleblian and Finkelstein, 1999). Decision makers then likely consider more anchor-inconsistent information because they learned to do so from their previous acquisitions in the focal market or because they have more private insights about choosing premiums, reducing the anchoring effect (cf. Wilson et al., 1996).

Moreover, with related experience, acquirers can draw on an alternative anchor—their own preceding acquisition in the focal market. Although from a more distant past, decision makers’ tendency to search locally for solutions within the organization (Cyert and March, 1963) may bring these deals in focus. The presence of multiple anchors reduces the influence of any single anchor (Switzer and Sniezek, 1991), though the anchor presented most recently, rather than the most relevant one, tends to receive most attention (Whyte and Sebenius, 1997), suggesting that acquirers may still anchor on the most recent preceding acquisition premium in the local market but its effect is reduced.

**Hypothesis 5:** Anchoring on a market’s preceding acquisition premium will be weaker for focal acquirers with more related acquisition experience.

Time constraints tend to increase anchoring (Epley, 2004) because selective search for anchor-inconsistent information requires more effort, while it is easier and relatively automatic to select anchor-consistent information. Higher acquisition rates, i.e., the number of deals in a short period prior to a focal deal, constrain decision makers’ time to set a premium. Haunschild, Davis-Blake, and Fichman (1994) found that acquirers are less cautious in appraising deals when they occur in quick succession as they divide their resources across several fronts. Moreover, higher acquisition rates generally form a poor foundation for acquisition capability (Hayward, 2002; Laamanen and Keil, 2008). Thus, with higher acquisition rates, acquirers should be more susceptible to anchoring, whereas less frequent acquirers can take more time to analyze the target firm, allowing them to consider more anchor-inconsistent information.

**Hypothesis 6:** Anchoring on a market’s preceding acquisition premium will be stronger for focal acquirers with higher acquisition rates.

**SAMPLE AND METHODS**

The sample included all completed M&As from the SDC database for 1986–2011. We selected deals with publicly listed targets and transaction values of at least $1 million (e.g., Haunschild, 1994). The final sample featured 13,442 deals, which included observations from 61 countries, across 73 industries (at the two-digit SIC level). The median deal value was US$61 million.

**Variables and operationalizations**

*Focal acquisition premium* was calculated as the percentage difference between the offer price and the target firm’s stock price four weeks before deal announcement (e.g., Beckman and Haunschild, 2002; Hayward and Hambrick, 1997). To correct for outliers, we Winsorized premium data between 0 and 200 percent (Officer, 2003). The *preceding acquisition premium* (the anchor) is the premium paid by another firm that made the acquisition directly preceding the focal deal in a given country and target industry (established by four-digit SIC code), which was calculated like the focal premium. *Recency* was calculated by number of days between the preceding and focal deal, then reversed so that higher values corresponded to more recent preceding deals. *Deal size similarity* reflected the percentage difference between the deal values of the preceding and focal deals. We took the absolute value to make it consistent for both large and small focal deals, and reversed the measure so that larger values indicated more similar deal sizes. We used a dummy variable to distinguish international acquirers from domestic acquirers. For *related acquisition experience*, we counted completed acquisitions that the firm made in the focal target industry prior to the acquisition, so it should capture related instead of unrelated experience (Haleblian and Finkelstein, 1999). *Acquisition rate* was measured by counting the average number of acquisitions in the two years prior to the focal deal (Laamanen and Keil, 2008).

For the hedonic regression analyses (see below), we collected information for two sets of control variables—one for the focal premium, and another for the preceding premium. We controlled for
synergy with business relatedness using four-digit SIC codes (e.g., Beckman and Haunschild, 2002); for reputable financial advisors by creating a binary variable, equal to 1 if the acquirers were advised by a top-15 financial advisor and 0 otherwise (according to rankings from DealBook) (Laamanen, 2007); for target growth potential using the market-to-book value ratio of its equity; for target financial performance using the returns on assets; and for target firm size using total assets (Kim et al., 2011). We controlled for signaling effects of the target (Reuer et al., 2012) by noting the reputation of target firms’ financial advisors (similar to the acquirer’s reputable financial advisors). To capture local market hotness, we calculated the cumulative abnormal returns of the local stock market index returns adjusted by the world equity market index returns in the 12 months before each focal deal, and for local market concentration, we calculated the Herfindahl index of each target industry using market share data from Computstat Global. To capture a possible bandwagon effect, we included the previous two years’ average acquisition premium in the target industry. We also controlled for host country GDP per capita, GDP growth rate, stock market capitalization, and corruption (Weitzel and Berns, 2006). Finally, we controlled for different acquisition types: tender offers, cash deals, and hostile takeovers, as well as competing bids and public versus private acquirers (Reuer et al., 2012).

Analytical approach

We adopt a hedonic regression approach following Beggs and Graddy (2009) who examined anchoring in the art auction field. The approach breaks down an outcome value into components, which are then determined separately through regression analyses. It allowed us to separate anchoring from a possible vicarious learning effect, which is important since the preceding acquisition premium could offer relevant insights from which the focal acquirers could learn. To obtain a predicted value of the focal premium, we run a first-stage hedonic regression model as follows:

\[ \pi_t = X_t \beta_t \]  

(1)

where \( \pi_t \) is the estimated focal premium, which is a function of time \( t \) observable characteristics \( X_t \), (these are the deal-, firm-, and country-level control variables to explain the focal deal premium). We then used these predicted values in our main second-stage estimating equation:

\[ P_t = \mu \times \pi_t + \delta \times (P_{t-1} - \pi_{t-1}) + \lambda \times (P_{t-1} - \pi_t) + \epsilon_t \]  

(2)

where \( P_t \) is the focal deal premium paid, \( \pi_t \) is the predicted focal premium, \( P_{t-1} \) is the preceding deal premium paid, \( \pi_{t-1} \) reflects the preceding predicted premium based on the preceding acquisition’s hedonic regression (i.e., deal-, firm-, and country-level variables to predict the preceding deal premium), and \( \epsilon_t \) is the model residual. The first term in the equation \( \pi_t \) captures the effect of control variables on the focal premium. The second term \( (P_{t-1} - \pi_{t-1}) \) is the residual from the preceding deal premium to identify unique information not explained by \( X_{t-1} \) (i.e., the variables to predict the preceding acquisition premium). Such unique information could offer specific insights related to the preceding acquisition premium that might be observed (learned vicariously) by focal deal decision makers but is not captured by the characteristics (control variables) suggested in the literature. The second term thus offers a control for vicarious learning.

The third term \( (P_{t-1} - \pi_t) \) is a deviation variable that will help to capture the anchoring effect (Beggs and Graddy, 2009). As Equation 2 indicates, it measures whether, after controlling for the effects of observable characteristics (first term) and vicarious learning (second term), the nominal value of the preceding acquisition premium, \( P_{t-1} \), influences the focal premium. A positive estimate of \( \lambda \) would imply that, if the predicted value of the focal premium is lower than the anchor, i.e., \( (P_{t-1} - \pi_t) > 0 \), it pulls the focal premium upwards; and if it is higher than the anchor, i.e., \( (P_{t-1} - \pi_t) < 0 \) it pulls the focal premium downwards. In either case, \( P_{t-1} \) acts as an anchor that pulls the focal acquisition premium towards the anchor value.

We ran a random effects regression model with the generalized least squares estimator; this is robust to unbalanced pooled cross-sectional time
series data (cf. Beckman and Haunschild, 2002; Gaur, Malhotra and Zhu, 2013; Zhu, 2013). The Hausman specification test showed that the fixed- and random-effect coefficients were not systematically different, suggesting that the random effects model is appropriate. We included year, acquirer, and target industry and country dummies. Finally, we adopted Heckman’s (1979) two-step model to address possible sample selection bias. From completed worldwide acquisitions between 1986 and 2011, we assigned deals included in our sample a value of 1 and other deals a value of 0. We ran a probit model to estimate the probability of selecting a sample deal by regressing the dummy on the list of deal and country characteristics, calculated the inverse Mill’s ratio, and included this ratio in our regression models.

RESULTS

Table 1 shows the first-stage hedonic regression results. In line with prior studies, larger-sized deals and targets with higher growth potential receive lower premiums (e.g., Laamanen, 2007); while targets with top advisors, tender and hostile deals, and deals with competing offers received higher premiums (e.g., Reuer et al., 2012).

Table 2 presents the second-stage regression results. Model 1 shows that the regression coefficient for the anchoring effect—the difference between the anchor (market’s preceding acquisition premium) and the predicted focal premium (obtained from the first-stage regression)—was positive and significant ($p < 0.01$), in support of Hypothesis 1. The coefficient (0.097) implies that every 10 percent difference between the market’s preceding premium and the predicted focal acquisition premium will pull the actual focal premium towards the preceding premium by nearly 1 percent. Furthermore, we confirm Hypotheses 2–6, finding stronger anchoring effects for more recent preceding deals (Model 2: $p < 0.05$), deal size similarity (Model 3: $p < 0.01$), international acquisitions (Model 4: $p < 0.05$), less related acquisition experience (Model 5: $p < 0.01$), and higher acquisition rates (Model 6: $p < 0.01$). The full Model 7 confirms these results as well.

Sensitivity analyses indicate that the results are robust (see online supporting information Appendix S1). For example, we controlled for other potential anchors: premiums paid by focal acquirers in their preceding deal and in their last two deals, which showed that the market’s preceding premium is a stronger anchor than the acquirers’ own preceding premiums. Results also were stable when controlling for additional acquirer characteristics, such as size, financial performance, cash flow, growth potential, and relative size. We also ruled out the possibility that our results may be influenced
Table 2. Second-stage random-effects GLS regression results

<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) Model</th>
<th>(2) Model</th>
<th>(3) Model</th>
<th>(4) Model</th>
<th>(5) Model</th>
<th>(6) Model</th>
<th>(7) Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal predicted premium</td>
<td>0.992*** (0.038)</td>
<td>0.991*** (0.035)</td>
<td>0.988*** (0.038)</td>
<td>0.993*** (0.038)</td>
<td>0.987*** (0.038)</td>
<td>0.982*** (0.038)</td>
<td>0.974*** (0.038)</td>
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<tr>
<td>Anchoring effect (preceding – predicted premium)</td>
<td>0.097*** (0.026)</td>
<td>0.108*** (0.026)</td>
<td>0.134*** (0.028)</td>
<td>0.083*** (0.026)</td>
<td>0.102*** (0.026)</td>
<td>0.079*** (0.026)</td>
<td>0.123*** (0.030)</td>
</tr>
<tr>
<td>Vicarious learning</td>
<td>0.062** (0.027)</td>
<td>0.060** (0.026)</td>
<td>0.064** (0.026)</td>
<td>0.060** (0.026)</td>
<td>0.056** (0.027)</td>
<td>0.061** (0.027)</td>
<td>0.057** (0.030)</td>
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<tr>
<td>Recency × anchoring effect</td>
<td>0.018** (0.008)</td>
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<tr>
<td>Size similarity × anchoring effect</td>
<td>0.016*** (0.005)</td>
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<tr>
<td>Size similarity</td>
<td>−0.790*** (0.202)</td>
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<tr>
<td>International acquisitions × anchoring effect</td>
<td>0.050** (0.020)</td>
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<tr>
<td>International acquisitions</td>
<td>1.754** (0.781)</td>
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<td>1.898** (0.783)</td>
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<tr>
<td>Acquisition experience × anchoring effect</td>
<td>−0.014*** (0.004)</td>
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<td></td>
<td>−0.018*** (0.005)</td>
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<tr>
<td>Acquisition experience</td>
<td>0.523** (0.239)</td>
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<td>0.780** (0.245)</td>
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<tr>
<td>Acquisition rate × anchoring effect</td>
<td>0.017*** (0.005)</td>
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<td>0.022*** (0.005)</td>
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<td>Acquisition rate</td>
<td>−0.576*** (0.173)</td>
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<td>−0.639*** (0.177)</td>
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<td>Inverse Mill’s ratio</td>
<td>1.398 (1.268)</td>
<td>1.311 (1.245)</td>
<td>1.186 (1.243)</td>
<td>1.077 (1.279)</td>
<td>1.439 (1.268)</td>
<td>1.509 (1.269)</td>
<td>0.942 (1.279)</td>
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<td>Year, industry, and country dummies</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Observations</td>
<td>13,442</td>
<td>13,442</td>
<td>13,442</td>
<td>13,442</td>
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<tr>
<td>Chi-square statistics</td>
<td>1,953.1*** 1,966.9*** 1,990.6*** 1,965.5*** 1,965.3*** 1,981.6*** 2,057.3***</td>
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Two-tailed tests for all models. Standard errors are shown in parentheses. All models include year and target industry dummies.

***p < 0.01; **p < 0.05; *p < 0.10

by focal and preceding acquirers having similar investment advisors or board interlocks (Beckman and Haunschild, 2002; Haunschild, 1994). We ran subsample analyses after removing those acquisitions where the focal and the preceding acquirer hired the same investment advisor, and also ran subsample analyses with acquisitions that occurred in the United States where the prior and the focal acquirers were competing firms (in the United States, the Clayton Anti-Trust Act of 1914 forbids any interlocks among competitors to avoid anticompetitive practices). The anchoring effect remained consistent.

DISCUSSION AND CONCLUSION

Introducing anchoring theory to the premium literature, this study illustrates that premium decisions are extraordinarily influenced by the premiums set for the deals that preceded focal deals in the market. In an effort to deal with uncertainty, managers—consciously or unconsciously—seem to rely on this preceding acquisition premium as an important heuristic. More specifically, this finding advances earlier work by Beckman and Haunschild (2002) and Haunschild (1994) who showed that premium decisions are influenced by other firms’...
premiums with whom focal acquirers share investment advisors or board interlocks. Our study indicates that the role of experiences of others may not always depend on these active interdependencies but also on an anchoring effect to resolve the complex task of premium setting.

Our results offer important managerial implications. Given the constraints in collecting information on targets, anchoring may enable managers to make rapid decisions and persuade shareholders that their premiums represent acceptable standards in the industry. Yet, by overly relying on preceding acquisition premiums, managers may ignore important information specific to the focal deal. Decision makers, as well as their advisors, therefore would be wise to consider the influence that anchoring has on their decision making, possibly by incorporating hard checks to make the influence of anchoring more explicit, and reduce exposure to its risks.

Several limitations of this study provide opportunities for further research. The current study does not offer detailed insight into how decision makers are influenced by preceding acquisition premiums. To better understand the process, we did interview several top executives involved in premium setting. Apart from confirming the role of preceding acquisition premiums, these interviews revealed that, despite extensive analyses of deal-specific information by middle managers, the ultimate decision makers—i.e., top team and board members—still tended to be highly uncertain about their decisions, and did not readily accept a price determined by deal-specific analyses. Obtaining more detailed firm-specific information could provide insight in the internal barriers to accepting and considering anchor-inconsistent information. This could also direct us to potential structural factors, such as flat versus tall structure, that could influence the role of anchoring. Clearly, more qualitative research can provide needed richer insight.

Our findings suggest unique effects for experienced, international, and serial acquirers. As such, interesting research opportunities lie in better understanding the effects of anchoring for these specific subsamples to gain deeper insight into anchoring in varied premium settings. Moreover, while we controlled for a number of alternative anchors, there may be others, such as the premiums paid by alliance partners, which could influence the premiums for some deals. Yet, as we begin to find strong evidence for the prevalence of anchoring on the premium decisions of others, the most critical next question may be whether, or under which conditions, such anchoring could be beneficial or detrimental to acquisition outcomes.

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REFERENCES


SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article:

Appendix S1. Sensitivity analyses.