© *Academy of Management Journal*
2019, Vol. 62, No. 5, 1307–1332.
https://doi.org/10.5465/amj.2017.0158

IMPRESSION OFFSETTING AS AN EARLY WARNING SIGNAL OF LOW CEO CONFIDENCE IN ACQUISITIONS

DANIEL L. GAMACHE
University of Georgia

GERRY McNAMARA
Michigan State University

SCOTT D. GRAFFIN
University of Georgia

JASON KILEY
Oklahoma State University

JERAYR HALEBLIAN
University of California, Riverside

CYNTHIA E. DEVERS
Texas A&M University

Researchers have long been interested in understanding the motives behind CEOs' actions. On the one hand, CEOs may pursue strategic actions because they are confident they will enhance firm value. Alternatively, CEOs may take actions even when they have low confidence in the value of those actions, perhaps driven by self-interest or social pressures. Although research suggests that CEO option exercises following an acquisition announcement are an *ex post* behavioral outcome of low CEO confidence in the acquisition's value-creation potential, prior research has not identified any *ex ante* signals shareholders can look for to assess acquiring CEOs' confidence when the acquisition is announced. We address this concern by exploring a potential early warning signal of low CEO confidence: impression offsetting. We theorize that impression offsetting—measured as other unrelated positive announcements made by the firm in the days immediately surrounding the acquisition announcement—may serve as an *ex ante* signal of low CEO confidence in the acquisition's value-creation potential, and, as such, will be positively associated with CEO option exercises, an *ex post* behavioral outcome of low confidence. We test our theory with a sample of 491 large acquisitions and find consistent support for our hypotheses.

Scholars argue that CEOs' strategic actions are driven by various motives. Some actions are undertaken because CEOs are confident these actions will increase long-term firm value, while others are done to accrue private benefits for the CEO (e.g., higher pay, greater power) or in response to external pressures (e.g., growth demands, merger waves). When actions are primarily driven by private interest motives or external pressures, CEOs are likely to be less confident that these actions will create long-term firm value (Devers, McNamara, Haleblian, & Yoder, 2013). Agency costs arise when CEOs pursue actions in respect of which they have low confidence regarding their long-term firm value-creation potential (Jensen & Meckling, 1976). Due to information asymmetries, however, discerning a CEO's motives for a given strategic action is extremely difficult. Thus, investors are often forced to rely on weak proxies to estimate the long-term value-creation potential of the actions CEOs pursue (Schijven & Hitt, 2012).

Concerns regarding instances in which CEOs take actions that do not serve shareholder interests drive significant government oversight and regulation (e.g., Sarbanes–Oxley Act of 2002, Dodd–Frank Act of 2010) as well as academic and practitioner scrutiny (Bebchuk

We would like to thank deputy editor Marc Gruber and three anonymous reviewers for their guidance and feedback throughout the review process.

& Fried, 2003; Boivie, Bednar, Aguilera, & Andrus, 2016). Nevertheless, evidence suggests that CEOs are regularly rewarded for engaging in actions that can erode shareholder value (Bliss & Rosen, 2001; Haleblian, Devers, McNamara, Carpenter, & Davison, 2009). These findings lead some scholars to argue that the governance policies designed to align CEO and shareholder interests are often ineffective (Boivie et al., 2016a). The popular press echoes these concerns with headlines such as "Pay for Performance? Coal CEOs Get Bonuses as Companies Lose Billions" (Nicklaus, 2016) and "Failed CEOs Truly Can Have It All" (Evans, 2016).

One setting where investors struggle to evaluate CEO motives and determine long-term value potential is in the context of large acquisitions (Devers et al., 2013; Schijven & Hitt, 2012; Zollo & Meier, 2008). Research has identified a range of motives for acquisitions, some of which are value creating and others that are not. Specifically, some CEOs are motivated to acquire for the benefit of their shareholders, believing the acquisitions they champion will lead to a valuable combination of assets, market power gains, or efficiency improvements (Haleblian et al., 2009). With such motivations, CEOs are likely confident in the long-term value-creation potential of these acquisitions—what we refer to as "acquisition-related confidence." Other CEOs, however, may view acquisitions as a form of empire building that increases their compensation and power, or to address social pressures, such as bandwagon pressures associated with acquisition waves (Devers et al., 2013; Kim, Haleblian, & Finkelstein, 2011; McNamara, Haleblian, & Dykes, 2008). Such CEOs are likely to be less confident that these acquisitions will generate long-term shareholder value (Gomez-Mejia & Wiseman, 1997; Seo, Gamache, Devers, & Carpenter, 2015). Although CEOs possess private information about the long-term value prospects of their acquisitions, investors must rely on public information to inform their evaluation (Schijven & Hitt, 2012). Thus, while research suggests *some* acquisitions are pursued even though CEOs are not confident they will generate shareholder value, we are unaware of any clear a priori signals regarding which acquisitions CEOs pursue under this condition.

This void leads us to our overarching research question: Is there a means by which investors can gauge a CEO's confidence in an acquisition when it is announced? If such a signal exists, it could provide investors with an early warning that illuminates when acquiring CEOs have low confidence in the long-term value-creation potential of their newly announced acquisitions. Research suggests that CEO stock option exercises in the months following major acquisition announcements are an *ex post* behavioral outcome of CEOs' level of confidence in the value-creation potential of those deals (Devers et al., 2013). Nevertheless, because investors only have access to such stock option exercise evidence well after the acquisition has been announced, their ability to respond preemptively by adjusting their equity holdings, or attempting to discourage the firm from completing an announced acquisition, is constrained. To date, no *ex ante* or preemptive signal of CEO acquisition-related confidence exists.

In this study, we suggest that "impression offsetting" is a behavior that may serve as an early warning signal that CEOs have low confidence in the long-term value-enhancing potential of an acquisition. Impression offsetting is a form of anticipatory impression management that is "initiated to positively influence external perceptions of the organization by releasing positive, but unrelated information, in anticipation of an event becoming known that may negatively violate external stakeholder expectations" (Graffin, Haleblian, & Kiley, 2016: 233). Extant research has explored the timing, focus, and purpose of impression offsetting, suggesting that it is undertaken to reduce the scrutiny firms may face regarding their strategic actions (Graffin et al., 2016). Research, however, has not explored why CEOs choose to engage in impression offsetting around some actions but not others (Graffin, Carpenter, & Boivie, 2011; Graffin et al., 2016). This absence is critical as it speaks to the ultimate motivations of CEOs in their strategic decision-making. Advancing this line of research, we thus theorize that CEOs are motivated to use impression offsetting when they have low confidence in the value potential of an action they are announcing.

To address our core question, we develop theory that suggests a positive association between impression offsetting surrounding the announcement of an acquisition (Graffin et al., 2016) and CEO option exercises following that announcement. We theorize that impression offsetting around acquisition announcements may serve as an *ex ante* signal of low CEO confidence in the value-creation potential of acquisitions. As such, we expect that impression offsetting will be positively associated with *ex post* behavioral outcomes associated with low confidence in the value-creation potential of deals, as evidenced by CEO option exercises (Devers et al., 2013). While we cannot directly measure CEO confidence (indeed even survey measures would be subject to substantial desirability biases), CEO equity actions—in the form of when they choose to exercise options—serves as an established proxy for executive confidence (Campbell, Gallmeyer, Johnson, Rutherford, & Stanley, 2011; Chen, Crossland, & Luo, 2015; Devers et al., 2013; Galasso & Simcoe, 2011; Hayward & Hambrick, 1997; Malmendier & Tate, 2005, 2008). We further argue that,

when CEOs perceive greater personal downside risk related to an acquisition, impression offsetting will be an even stronger signal that CEOs have low confidence in the value potential of their acquisitions and thus strengthen the positive association between impression offsetting and CEO option exercises. We test this proposition by examining CEO-, firm-, and industry-level conditions that lead CEOs to perceive higher downside acquisition-related potential. We theorize that, due to this increased downside risk salience, the positive association between impression offsetting and subsequent CEO options exercised will be stronger as acquiring CEOs attempt to reduce firm scrutiny and limit threats to their equity value.

We see three central contributions from our study. First, we contribute to theory on impression management by providing evidence for a specific motivation for the use of anticipatory impression management. Indeed, existing theory in this area has not explored the motivations associated with impression management (e.g., Graffin et al., 2011). By linking impression offsetting around acquisitions to CEO option exercises following acquisition announcements, we extend impression management research and suggest CEOs engage in impression offsetting when they have low confidence in the value-creation potential of actions.

Second, our study reveals an early signal for when CEOs are acquiring even though they have low confidence in the deal's long-term value-creation potential. Thus, we theoretically derive and empirically support the existence of a tangible action shareholders can use to gain insight into the motives of the CEOs who champion those deals. Further, our theory and empirical findings suggest impression offsetting becomes an even stronger signal of low confidence when downside risk salience is high.

Third, we provide important implications for other theoretical perspectives, specifically signaling theory (see Connelly, Certo, Ireland, & Reutzel, 2011, for a review) and behavioral theory (Bromiley, 1991; Greve, 2003). Perhaps surprisingly, signaling theory research primarily focuses on intentional signals that executives send (Connelly et al., 2011). However, importantly, we find evidence of an unintended signal that CEOs may send by using impression offsetting—a lack of confidence in the value-creation potential of an acquisition. Indeed, impression offsetting may be a valuable, but unintended, signal of which investors are yet unaware. We believe that our findings may spark a new line of research investigating the existence of other such unintended signals that executives send. Finally, our results provide an important contribution to behavioral theory, by offering the ability to assess the degree of confidence CEOs have in a range of actions that may be driven by behavioral processes, such as actions arising from problemistic versus slack search.

THEORY AND HYPOTHESES

Motivations for Acquisitions

The primary goal of corporate governance is to ensure CEOs undertake actions that provide value for their firm through effective monitoring and incentive programs (Jensen & Meckling, 1976). Substantial evidence, however, suggests that acquisitions generally do not enhance firm value (Christensen, Alton, Rising, & Waldeck, 2011; Haleblian et al., 2009; King, Dalton, Daily, & Covin, 2004), and frequently result in negative market reactions (Datta, Iskandar-Datta, & Raman, 2001; Datta, Pinches, & Narayanan, 1992; Graffin et al., 2016). Despite this evidence, top managers invest trillions of dollars (U.S.) in acquisitions each year.

Given the uncertain value creation associated with acquisitions, shareholders are likely interested in CEOs' motivations for pursuing them. On the one hand, CEOs may pursue acquisitions because they are confident the acquisition will create long-term value. This could occur when acquisitions trigger greater market power and reduce competition (Devers et al., 2013; Kim & Singal, 1993), increase efficiency (Holcomb, Holmes, & Hitt, 2006), enhance internal synergy opportunities (Hitt, Ireland, & Harrison, 2001; Mahoney & Mahoney, 1993), or allow access to scarce resources (Puranam & Srikanth, 2007; Uhlenbruck, Hitt, & Semadeni, 2006). CEOs may also believe they have private information about the target's valuation, allowing them to acquire an undervalued asset (McNamara et al., 2008; Myers & Majluf, 1984).

On the other hand, a more troublesome category of motives occurs when CEOs pursue acquisitions for which they have low confidence in their long-term value-creation potential (Devers et al., 2013). Importantly, we are not suggesting that CEOs make acquisitions when they are confident it will destroy value; rather, they are simply not highly confident it will create long-term value for shareholders. Research suggests two reasons why CEOs may have low confidence in their acquisitions. First, CEOs may acquire for their personal gain (Haleblian et al., 2009) because "even mergers which reduce shareholder value can be in a manager's private interest" (Bliss & Rosen, 2001: 110). CEOs may thus have self-interested motives for acquiring—most notably, compensation benefits (Seo et al., 2015). Indeed, a CEO's pay tends to increase following an acquisition whether or not it provides shareholder value (Bliss & Rosen, 2001; Grinstein & Hribar, 2004; Harford & Li, 2007). Moreover, acquisitions are associated with even

more rapid pay increases than those from similar levels of organic growth (Bliss & Rosen, 2001; Grinstein & Hribar, 2004; Harford & Li, 2007). Acquisitions can also benefit CEOs by increasing the complexity and scope of their firms, which may exacerbate information asymmetries and restrict outside monitoring and evaluation (Bloom & Milkovich, 1998; Devers et al., 2013; Milgrom & Roberts, 1982), enhance managerial discretion and bargaining power (Hambrick, Finkelstein, & Mooney, 2005; Henderson & Fredrickson, 1996), and further entrench top managers (Hoskisson & Turk, 1990; Walsh & Seward, 1990). Thus, despite public professions of value-creating motives, research suggests acquisitions may be driven by self-interested motives (Devers et al., 2013).

Second, CEOs may pursue acquisitions in response to social pressures they face, such as competitive pressure during acquisition waves or from powerful stakeholders, such as activist investors or financial analysts (Greenwood & Schor, 2009; Haleblian, McNamara, Kolev, & Dykes, 2012; Kim et al., 2011). Also, as firms identify and negotiate with potential acquisition targets, the time and money the firms expend and the trust they build with target firms may create social pressures that lead to an escalation of commitment to proceed with the acquisition even when the CEO comes to question its value (Schijven & Hitt, 2012). In these situations, CEOs are likely to have low confidence in their acquisitions' long-term value-creation potential, because their primary motives are responding to social pressures rather than pursuing value-creation opportunities. Regardless of the drivers, investors benefit from knowing when a CEO is making an acquisition in which they have low confidence.

To tease out CEO motivations, researchers have used changes in CEO option holdings as a behavioral outcome regarding the level of confidence CEOs have in their firms' value-creation potential (Campbell et al., 2011; Chen et al., 2015; Galasso & Simcoe, 2011; Hayward & Hambrick, 1997; Malmendier & Tate, 2005, 2008).[1] Thus, while we are not able to directly measure CEO confidence, in our context, exercising options following an acquisition is an *ex post* behavioral outcome of CEO confidence in the long-term value-creation potential of a deal (Devers et al., 2013). If acquiring CEOs are confident the acquisition will lead to future value creation—that is, they possess what we refer to as "acquisition-related confidence"—they likely believe the firm's stock price will increase as the value of the acquisition becomes apparent. Accordingly, CEOs with such confidence will tend to hold their stock options so they can enjoy the expected stock appreciation (Devers et al., 2013). In contrast, if CEOs have low acquisition-related confidence, they likely have less confidence in the future value of their stock options, as investors are prone to react negatively, once it becomes apparent that the acquisition may not generate shareholder value. CEOs who have low acquisition-related confidence are thus likely to exercise at least a portion of their at-risk stock options after acquisition announcements, to limit losses to accumulated equity value (Devers et al., 2013).

Although post-announcement stock option exercises provide an *ex post* behavioral outcome of CEO acquisition-related confidence, such exercises do not indicate *which* acquisitions CEOs have low confidence in at the time of announcement. Of course, at the time of the announcement, investors and CEOs must deal with uncertainty about the economic consequences of particular acquisitions. Indeed, both investors and CEOs have incomplete information regarding the target firm and the value that will result from the combined entity (Delong & Deyoung, 2007). Investors, however, almost always have less information than managers (Delong & Deyoung, 2007; Schijven & Hitt, 2012). For instance, in conducting due diligence prior to announcing the acquisition, the acquiring firm has the opportunity to assess the target, which typically involves extensive financial and strategic information not available to investors. Managers are thus likely to have superior information and, in turn, a more accurate assessment of likely acquisition outcomes (Haleblian et al., 2009; Schijven & Hitt, 2012). While some factors such as premium paid and percentage of stock used in an acquisition may inform investors' evaluation of that acquisition's potential value (Schijven & Hitt, 2012), CEO motives underlying specific deals remain difficult to discern upon announcement. We argue that "impression offsetting"—making additional unrelated positive material announcements—at the time of the acquisition announcement acts as an early warning signal, providing stakeholders with an understanding of whether or not

[1] We focus on "situation-specific confidence"—the confidence the CEO has in the long-term value-creation potential of the acquisition. Importantly, situation-specific confidence is not the same as a CEO's generalized trait level of (over-)confidence or hubris (e.g., Hayward & Hambrick, 1997). While trait (over-)confidence certainly influences a CEO's tendency to be confident in a particular acquisition, the decision to acquire for self-interested motives or in response to social pressures will make them less confident than otherwise (perhaps still fairly confident, compared to CEOs with low trait overconfidence, but less confident than they would normally feel). In other words, even CEOs who are overconfident by nature can be less confident about the value-creation potential of specific firm actions.

the CEO is confident in the acquisition and, therefore, may be primarily driven by long-term firm value creation or self-interested motives.

As such, our theoretical arguments focus on the proposed association between two discrete actions that we believe offer insight into CEO acquisition-related confidence at distinct points in time. As we noted, prior work argues and provides evidence that CEO option exercises following acquisition announcements are a behavioral outcome associated with low CEO confidence in the long-term value potential of an acquisition (Devers et al., 2013). Our study advances this research by proposing that impression offsetting functions as an early warning signal indicating that acquiring CEOs have low confidence in the ability of their announced acquisitions to enhance firm value. Prior work (e.g., Graffin et al., 2016) has not explored why CEOs make additional unrelated positive announcements surrounding an acquisition. In the following section, we argue that impression offsetting can serve as an *ex ante* signal that acquiring CEOs have low confidence in the value-creation potential of announced acquisitions, and, as such, we expect that impression offsetting will be positively associated with subsequent CEO option exercises.

Impression Offsetting as an Early Warning

The literature on impression management focuses on techniques used by managers to influence perceptions of their organizations (Bansal & Clelland, 2004; Elsbach, 2003; Elsbach, Sutton, & Principe, 1998). Although this work has also shown that impression management can either be reactive or anticipatory (Elsbach, 2006), most has focused on "reactive impression management"—steps taken to influence perceptions in response to a negative event that was unanticipated by the organization (Elsbach, 2012). More recent research, however, has begun to emphasize the importance of "anticipatory impression management" (hereafter, "AIM"). AIM tactics occur when organizations act to influence public perceptions before or contemporaneous to an event (Busenbark, Lange, & Certo, 2017; Graffin et al., 2011; Holcomb et al., 2006).

Research on impression management provides evidence for two key points: (1) CEOs frequently direct their public or investors relations staff to engage in impression management; and (2) through the use of impression management techniques, CEOs are able to effectively influence stakeholder opinions. First, research suggests that CEOs actively shape media coverage through their use of public relations, press releases, and social media (Farrell & Whidbee, 2002; Lovelace, Bundy, Hambrick, & Pollock, 2018). Indeed, CEOs go through substantial efforts to influence stakeholders in this way; Westphal and Deephouse (2011), for example, have shown that CEOs actively engage in ingratiation behaviors with journalists in attempts to positively influence how the firm is covered and even punish journalists who portray them unfavorably by subsequently refusing to speak with those journalists (also see Shani & Westphal, 2016).

More directly connected to AIM, research suggests that CEOs and boards strategically guide the timing of press releases to coincide with other important events (Blankespoor & deHaan, 2015; Graffin et al., 2011; Graffin et al., 2016). In this vein, Graffin and colleagues (2011: 750) quoted a director commenting on the strategic release of information around a CEO hire announcement as follows:

> We've tried to avoid any second guessing [by the stock market] by making sure that we announce the new CEO at a time when a lot of other stuff is going on. This way, if the market does react negatively, it's pretty easy to say it was not the CEO announcement.

In our own conversations with CEOs, we find similar evidence. For example, the CEO of an FTSE 100 company discussed the focus they have on directing public relations activities:

> I have consolidated all of our communications activities under a single person who is an expert so that investor relations, media relations, internal comms ... But the main thing is that everybody is singing off the same song sheet no matter who the audience is. ... [The media] will form their own views but a lot of it has to do with ... how you shape the messages. ... And then we line up all of our subsequent media activities ... and key media message pieces that have been developed all by the same team that was all sitting around the big table, which includes me and the CFO as well.

Secondly, research also demonstrates the effectiveness of the actions CEOs take to influence stakeholder opinions, such as how firms engage in symbolic actions to shape external observers' impressions (e.g., Bednar, 2012; Davis, 2005; Elsbach, 1994; Westphal & Zajac, 1998; Zott & Huy, 2007). For instance, Westphal and Zajac (1998) found the market responded positively to the announcement of the adoption of long-term incentive programs—even when those programs were not implemented. This suggests that shareholders respond positively to announcements by the firm—even when those

announcements do not align with actual behavior. Research also provides evidence that the market responds positively to the announcement of stock repurchase programs and does not correct itself when these plans are not actually implemented (Westphal & Zajac, 2001; Zajac & Westphal, 2004). More recently, Bednar (2012) showed that symbolic actions shape positive media coverage, finding that symbolic governance reform announcements resulted in more positive coverage from the media. Finally, and most closely tied to our specific context, Graffin and colleagues (2016) found a systematic relationship between impression offsetting around an acquisition and the market reaction to those acquisitions, thus providing strong evidence for the effectiveness of AIM.

Despite evidence of its effectiveness, theory on AIM has not explored what motivates CEOs' use of these techniques. For example, in a study of the use of AIM around CEO succession announcements, Graffin and colleagues (2011: 767) noted:

> [Directors] might be trying to protect their own interests by obfuscating CEO succession announcements, if it is self-serving to prevent assessing shareholder reaction to the decision. Or, despite a conviction that they have hired exactly the right CEO to lead the corporation forward, they may be looking out for the best interest of the organization and guarding against information asymmetry.

Although this work focused on CEO succession situations, its general argument that the motives for AIM are unclear is applicable to AIM used around any strategic action, including acquisitions.

Accordingly, our study also pursues a secondary research question: Why do CEOs use AIM? We believe that CEOs' fear of scrutiny is likely influenced by the confidence they have in the actions they pursue. Therefore, we theorize that, when CEOs have low confidence in the value-creation potential of their actions, they employ impression offsetting to reduce external scrutiny of those strategic actions, shield themselves from criticism, and protect the value of their variable compensation and the equity they have accumulated in their firm. By proposing that impression offsetting is an early warning signal of low confidence in the value potential of announced strategic actions, we theorize that CEOs are motivated to use impression offsetting when they question the value potential of an action.

One type of AIM prevalent around acquisitions is impression offsetting (Graffin et al., 2016). With this impression management technique, firms "offset" a potential negative reaction by intentionally releasing unrelated, positive information surrounding an announcement (Graffin et al., 2016). The release of positive information provides additional factors that investors must consider. Instead of being able to focus on one particular event (to which they might react negatively), investors now must consider information regarding multiple events. This inhibits their ability to isolate the effects of any particular event (McWilliams & Siegel, 1997). While Graffin and colleagues (2016) found that firms engage in impression offsetting around acquisitions and that this practice is effective at buffering against negative market reactions, they did not explore what motivates CEOs to engage in this impression management tactic. Addressing this open question regarding executives' motivations for engaging in impression activities is an important opportunity to enhance the literature. Indeed, while self-serving motivations and value-creation motivations may result in outwardly identical actions, better understanding these motivations has important corporate governance implications. In this paper, we look directly at a behavior that follows the use of impression offsetting—the exercising of stock options—that suggests impression offsetting is used when CEOs lack confidence in the long-term value potential of a deal.

One example of impression offsetting appears evident in Chevron's acquisition of Unocal on April 4, 2005; the firm made three positive but unrelated announcements all on the day following the acquisition. In one, Chevron announced a supply deal: "Hebron Unitization and Joint Operating Agreement Signed." Another announcement disclosed a deal to increase gas volumes: "ChevronTexaco signs Framework Agreement for Australian Gas Resources: Customers Will Have Access to Increased Gas Volumes from Giant Greater Gargon Area." Finally, they announced that an oil product had reached new standard requirements: "Chevron Delo 400 Multigrade Diesel Engine Oil Meets New European ACEA E7-04 Specification; Delo Meets Rigorous Requirements, Reinforces Global Platform Position." Interestingly, Chevron acquired Unocal after fighting off a competing bid by Cnooc, a Chinese petroleum firm, possibly leading the CEO of Chevron to question whether the value of the acquisition would justify the heightened price Chevron paid.

We suggest that impression offsetting can serve as an early warning that CEOs may be making an acquisition in which they have low value creation-related confidence. If, as we argue, impression offsetting is an *ex ante* signal of CEO low acquisition

confidence, we expect that the release of additional positive, but unrelated, information around an acquisition surrounding acquisition announcements will be positively related to subsequent option exercises, an *ex post* behavioral outcome of low confidence in the value-creation potential of that action. More specifically, we propose that CEOs will use impression offsetting when they have low confidence in the long-term value potential of an acquisition for two primary reasons: the release of additional positive information can (1) reduce the scrutiny firms face regarding the acquisition and (2) buffer against potential negative market reactions, thereby protecting the accumulated value of CEOs' stock options. For example, when acquiring CEOs have low, rather than high, acquisition-related confidence, they are more likely to release additional information in order to reduce the external scrutiny those acquisitions face. If CEOs are not confident about the long-term value of an acquisition, they are likely concerned that investors will also be skeptical, question their decision, and may even attempt to block completion of the acquisition. We argue, however, that, by releasing positive but unrelated information at the time of announcement, acquiring CEOs try to "offset" the likelihood that their announcement will be perceived negatively by shareholders (Graffin et al., 2016: 233). This positive information, therefore, is aimed at directing shareholder attention away from the acquisition and making the ability to isolate the market's assessment of any specific strategic action more difficult. Concern about negative investor reactions is likely to be especially high for CEOs with low confidence in the long-term value potential of the acquisition. Thus, we attempt to contribute to the impression offsetting literature by exploring a key motivation for using impression offsetting not previously explored: low CEO action-specific confidence. We argue that, when CEOs have low acquisition-related confidence, they will use impression offsetting to reduce scrutiny on the acquisition announcement, thereby protecting their personal compensation and equity holdings. In contrast, when CEOs have high acquisition-related confidence, they will refrain from releasing additional information so that stakeholders only focus on the acquisition announcement.

Second, CEOs may use impression offsetting to protect against a negative market reaction to the acquisition to both reduce criticism from investors regarding their leadership and to safeguard the accumulated value of their equity portfolios. Because CEOs are primarily compensated with stock-based incentives and often hold substantial stock option portfolios (Nyberg, Fulmer, Gerhart, & Carpenter, 2010), they are keen to avoid potential negative market reactions that may decrease the value of their wealth. Consistent with this desire, the use of impression offsetting has been shown to substantially reduce negative market reactions to acquisitions (Graffin et al., 2016). Building on this work, we argue that CEOs are likely to use offsetting when their acquisition-related confidence is low, as they are concerned investors may respond negatively to those deals, and thus reduce the value of their equity stake in the firm. When CEOs' acquisition-related confidence is high, however, they will be less concerned about the potential for negative reactions, and, as such, be less likely to engage in impression offsetting.

Together, these arguments suggest that CEOs release positive but unrelated information around an acquisition when they have low acquisition-related confidence, to reduce investor scrutiny and protect the value of their equity. On the other hand, when CEO acquisition-related confidence is high, they will prefer to focus attention on the acquisition, and, as such, be less likely to release additional positive information. We propose, then, that the use of impression offsetting reflects an *ex ante* signal of low CEO confidence in long-term acquisition value-creation potential. If our proposition holds, impression offsetting should be positively related to CEO post-acquisition option exercises, an *ex post* behavioral outcome associated with low CEO confidence in the potential of their acquisitions to enhance firm value. As such, we hypothesize:

Hypothesis 1. Impression offsetting around an acquisition announcement will be positively associated with the percentage of stock options exercised by the CEO in the period following the announcement.

Influence of Salient Downside Risk

Although we argue that CEOs who acquire when they have low (rather than high) confidence in their potential to create long-term value are more likely to use impression offsetting, we propose that this association is not consistent across all situations. In particular, research suggests that perceptions of downside risk significantly impact CEO strategic decisions (Gomez-Mejia & Wiseman, 1997). Indeed, if impression offsetting is used when CEOs have low confidence in the value-creation potential of an acquisition, it should be even more important to CEOs when they sense higher downside risks. As a result, when CEOs are highly cognizant of downside risks,

we expect that the positive association between impression offsetting around an acquisition announcement and subsequent exercising of options is even stronger.

Since releasing positive but unrelated information around an acquisition can reduce scrutiny on the firm and limit threats to accumulated equity value holdings (Graffin et al., 2016), CEOs may be more prone to employ impression offsetting as their downside risk concerns increase. Although downside risk concerns are unlikely to overwhelm potential personal benefits to CEOs from acquiring, it may make them more likely to seek ways to reduce scrutiny and protect the value of their equity. While all CEOs are concerned about downside risk, we suggest that such concerns are amplified in some situations. Carpenter, Geletkanycz, and Sanders (2004) argued that CEOs' perceptions are shaped by leadership-, firm-, and industry-level factors. This suggests that certain factors at each level of analysis likely influence CEOs' acquisition-related downside risk perceptions. Extending this work, we argue that CEO age, firm reputation, and industry dynamism will each strengthen the positive association between impression offsetting surrounding an acquisition announcement and subsequent exercising of stock options.

Leadership-level moderator: CEO age. Research suggests that CEOs are increasingly sensitive to downside risks as they age (Finkelstein, Hambrick, & Cannella, 2009; Serfling, 2014). We contend that, when CEOs have low confidence in the long-term value potential of their acquisitions, the association between impression offsetting around acquisition announcements and post-announcement option exercises will be stronger for older CEOs, for at least three reasons. First, as CEOs age, they tend to focus more on their financial security and retirement needs (Hambrick & Mason, 1984). Older CEOs are therefore more sensitive to potential declines in the value of their equity holdings. These same concerns may drive CEOs to make acquisitions in order to increase their compensation before they retire. Yet, when they do acquire, older CEOs may have greater concern about their financial security than younger CEOs, making the potential for negative market reactions particularly salient to them. Thus, among CEOs who have low confidence in the long-term value-creation potential of acquisitions, we expect older CEOs to have an increased propensity to announce unrelated positive information to counteract the potential for negative reactions, thus strengthening the underlying positive association between impression offsetting and subsequent option exercises.

Second, in general, older CEOs have shorter career horizons. They are thus particularly attuned to career security and likely to see greater risk to their employment status when making acquisitions in which their confidence in long-term value creation is low (Hambrick & Mason, 1984; Myers & Majluf, 1984). As McClelland and O'Brien (2011: 143) noted, "The threat of being forced out might be particularly poignant for older CEOs, as they are less likely than are their younger counterparts to secure similar positions in peer firms." These concerns may make the potential managerial discretion and entrenchment benefits of acquiring (Henderson & Fredrickson, 1996; Hoskisson & Turk, 1990; Walsh & Seward, 1990) particularly appealing to older CEOs. Yet, when pursuing acquisitions in which they have low confidence, they are likely more concerned about heightened scrutiny that could trigger employment risk than their younger CEO counterparts. For older CEOs who have low acquisition-related confidence, reducing scrutiny and limiting stock price decline following acquisition announcements are important reasons for releasing additional positive information (Graffin et al., 2016), as each reduces the potential of the acquisition being used as a reason to force them out, thus strengthening the positive association between impression offsetting and subsequent stock option exercising.

Third, as CEOs age, they tend to become increasingly interested in building and ensuring their legacy as strong leaders (Elliott & Shaw, 1988; Zacher, Rosing, & Frese, 2011). Thus, while older CEOs may see legacy value in growing the firm through acquisitions, when they have low acquisition-related confidence, they are likely to become more concerned about limiting the scrutiny of outside evaluators, which has the potential to undercut their legacies. As a result, compared to younger CEOs, when older CEOs have low acquisition-related confidence, they are more likely to employ impression offsetting in order to lessen scrutiny of these acquisitions so they can improve their chances of cementing their legacies as strong corporate leaders. As such, we would expect the positive association between impression offsetting and subsequent exercising of stock options to be stronger for older CEOs.

Taken together, our theory suggests that older CEOs are particularly aware of downside risks to their financial situations, their formal positions, and their legacies. As such, when CEOs have low confidence in such long-term value creation, we propose that older CEOs will be more likely to engage in offsetting than younger CEOs, thus strengthening the positive association between

impression offsetting and subsequent options exercised. More formally, we hypothesize:

Hypothesis 2. The association between impression offsetting around an acquisition announcement and subsequent stock options exercised by the CEO will be moderated by CEO age such that the association will be stronger for older CEOs.

Firm-level moderator: Firm reputation. CEOs also have an elevated sense of downside risk when they lead high-reputation firms because their firms face greater scrutiny and suffer more negative market reactions for negatively perceived events than do firms without this asset (Graffin et al., 2016; Rhee & Haunschild, 2006). As such, we argue that, among acquiring CEOs, the association between impression offsetting around acquisition announcements and subsequent CEO option exercise will be stronger for CEOs of high-reputation firms, for at least two reasons. First, high-reputation firms face greater scrutiny than other firms (Fombrun, 1996). High-reputation firms are, by definition, well known and highly visible (Lange, Lee, & Dai, 2011), thus their actions receive greater attention and scrutiny than similar actions taken by other firms (Rhee & Haunschild, 2006; Zavyalova, Pfarrer, Reger, & Hubbard, 2016). As we argued earlier, when CEOs have low acquisition-related confidence, they may make additional unrelated positive announcements to reduce the scrutiny attributed to any one event and thereby protect their personal compensation and equity holdings. We propose, therefore, that, when CEOs of high-reputation firms have low acquisition-related confidence, they will be more concerned about the high level of scrutiny the deal will face, thus increasing their propensity to engage in impression offsetting, to lessen scrutiny of that strategic action (Graffin et al., 2016). Thus, among CEOs with low confidence in their acquisitions' long-term value-creation potential, impression offsetting becomes a more important signal of low CEO confidence in the acquisition among high-reputation firms. As such, the association between impression offsetting around acquisition announcements and subsequent stock option exercise should be stronger for CEOs of high-reputation firms than for CEOs of other firms.

Second, research suggests that high-reputation firms also face increasing expectations (Mishina, Dykes, Block, & Pollock, 2010; Zavyalova et al., 2016). On the one hand, these high expectations may increase the pressure on and benefits for CEOs of high-reputation firms to grow through acquisitions (Haleblian, Pfarrer, & Kiley, 2017). On the other hand, they increase the importance of avoiding negative responses to those deals. When high-reputation firms receive negative attention, criticism and scrutiny intensify, resulting in greater investor penalties for high-reputation firms than other firms (Brooks, Highhouse, Russell, & Mohr, 2003; Rhee & Haunschild, 2006; Zavyalova et al., 2016). Indeed, recent research suggests that CEOs of high-reputation firms engage in frequent acquisitions but also receive market penalties for doing so (Haleblian et al., 2017). Among CEOs who have low acquisition-related confidence, therefore, the potential downside risk to their equity holdings is higher for CEOs leading high-reputation firms than for those leading other firms. CEOs of high-reputation firms thus have a greater incentive to make additional positive announcements around the acquisition announcement when they have low acquisition-related confidence, thus strengthening the association between impression offsetting and subsequent options exercised by the CEO.

In summary, high-reputation firms face higher scrutiny and greater market penalties for negative attention than do other firms. When they have low acquisition-related confidence, we thus propose that acquiring CEOs of high-reputation firms will be more motivated to engage in offsetting than CEOs of other firms, making impression offsetting a stronger signal that CEOs lack confidence in the acquisition. We thus expect that the association between impression offsetting around acquisitions and subsequent CEO stock options exercised is stronger for CEOs of high-reputation firms than for CEOs of other firms, and hypothesize:

Hypothesis 3. The association between impression offsetting around an acquisition announcement and subsequent stock options exercised by the CEO will be moderated by firm reputation such that the association will be stronger for firms with high reputation.

Environment-level moderator: Industry dynamism. Downside risk may also be particularly salient for acquiring CEOs whose firms operate in dynamic industries. "Dynamic industries" are characterized by instability and unpredictability (Dess & Beard, 1984; Smart & Vertinsky, 1984), making it more difficult for external parties to assess the potential value of the acquisition, increasing CEO concerns about potential downside reactions. Further, in dynamic conditions, firm performance and investor reactions to acquisitions are likely to fluctuate, with greater upswings and larger downswings compared to more stable conditions (McGrath, 2013; Stein & Stein, 1991). We thus suggest that, among CEOs who have low acquisition-related confidence, when industry dynamism is high, they will have more of an incentive to use impression offsetting surrounding that acquisition than when dynamism is

low. As such, we would expect that, in dynamic environments, impression offsetting is a stronger *ex ante* signal for low acquisition-related confidence, thus strengthening the relationship between impression offsetting around an acquisition announcement and subsequent option exercising. We offer two primary reasons for this prediction.

First, CEOs operating in dynamic industries are likely more cognizant of the need to protect their financial position. As a significant portion of CEOs' personal financial capital is typically tied to firm performance (Finkelstein et al., 2009), they tend to be concerned about the financial impact of short-term negative reactions to their strategic actions (Devers et al., 2013). Because market reactions to acquisition announcements in dynamic industries are more volatile than reactions to similar announcements in more stable industries (D'Aveni, 1994; Stein & Stein, 1991), concerns regarding the potential for large market value downturns are more salient for CEOs of acquiring firms in more dynamic industries than those in less dynamic industries. As we argued earlier, when CEOs have low confidence in the long-term value-creation potential of their acquisitions, they will be more concerned that the deal will receive negative attention. We propose that, when CEOs have low acquisition-related confidence, those operating in more dynamic industries will be more concerned about negative market reactions than those who operate in less dynamic industries. As such, these CEOs will have a greater incentive to make additional positive announcements around the acquisition announcement, thus making impression offsetting a stronger signal of low acquisition-related confidence and making the positive association between impression offsetting and subsequent option exercises stronger in this context.

Second, in dynamic industries, the level of information asymmetry between managers and investors is higher than in stable industries (Cormier, Houle, & Ledoux, 2013). In such settings, investors will likely search for signals to reduce these asymmetries (Connelly et al., 2011). For CEOs who have low acquisition-related confidence, the increased scrutiny is likely troublesome because they may fear that investors will also not see long-term value in the deal. Thus, understanding the heightened information asymmetry concerns of investors, CEOs in dynamic industries who have low acquisition-related confidence will be more motivated to release additional positive unrelated information to reduce the scrutiny of investors. Therefore, we would expect that, in dynamic environments, the positive association between impression offsetting and subsequent option exercises will be stronger.

In sum, we expect that, when acquiring CEOs have low acquisition-related confidence, those operating in dynamic industries will have more incentive to engage in impression offsetting because they are likely more concerned about protecting their financial positions from volatile market reactions and mitigating the effect of investors' heightened information search efforts than acquiring CEOs in more stable industries. As such, in dynamic environments, the use of impression offsetting should be a stronger signal that CEOs have low confidence in the value-enhancing potential of their acquisitions. Thus, the positive association between impression offsetting surrounding an acquisition and subsequent stock option exercised by the CEO is likely to be stronger for firms in highly dynamic industries. We thus hypothesize:

Hypothesis 4. The association between impression offsetting around an acquisition announcement and subsequent stock options exercised by the CEO will be moderated by industry dynamism such that the association will be stronger for firms facing more dynamic industry conditions.

METHOD

Sample

Our sample included all acquisitions by S&P 500 firms in which both the acquirer and target were public, U.S.-based firms. We retained transactions for completed, majority acquisitions, greater than 100 million USD, and announced between 1995 and 2009 for which a press release announcing the acquisition was available. Focusing on large acquisitions allowed us to ensure that these were material actions for the firm that represented decisions likely to be driven by the CEO (e.g., Graffin et al., 2016; Hayward & Hambrick, 1997).

We developed a database from several sources. Acquisition data were collected from the SDC Platinum Domestic Mergers database. We gathered press releases for our announcement variables using the PR Newswire and Business Wire databases available in LexisNexis. We also collected data from Compustat (firm-level and industry-level variables), the Center for Research in Security Prices (our *Annual* β variable), Thomson Reuters Insider Filing data (CEO equity holdings changes), Eventus (stock market reaction), Risk Metrics (board-level variables), and ExecuComp (compensation and demographic variables). As explained below, our dependent variable is measured based on equity actions in the period

following the acquisition announcement. All predictor variables were thus measured one quarter-year before the dependent variable, except for firm-level control variables, which were measured one full year before the dependent variable. Our full data collection resulted in an initial sample size of 770 acquisitions, reduced by missing data to a final analysis sample of 491 acquisitions.[2]

Dependent Variable

Subsequent Options Exercises. To determine CEO level of expressed confidence in their firm's acquisition, we used a proxy established in prior research, which has demonstrated subsequent exercising of stock options by the CEO is an *ex post* behavioral outcome reflecting the CEO's level of confidence in an acquisition (Devers et al., 2013). The core premise here is that if CEOs are highly confident in the long-term value-creation potential of their acquisitions they will hold onto their stock options to benefit from the appreciation in stock value that they expect to occur. In contrast, if CEOs have low confidence in the value-creation potential of their acquisitions they will exercise options in order to avoid the value erosion that could occur if share prices decline (Devers et al., 2013). Using Thomson Reuters Insider Filing data, summarized to quarters, we measured *Subsequent Options Exercises* as the ratio of (1) the options exercised by the CEO in the quarter following the focal acquisition and (2) the number of exercisable options held by the CEO at the end of the prior year.[3] We logged this variable due to its skewed distribution. We focused on stock option exercises for two key reasons. First, stock options represent the single largest component of CEO pay in U.S. public firms (Devers, McNamara, Wiseman, & Arrfelt, 2008). Second, because CEOs are awarded stock options on a regular basis (annually, or more frequently), they often hold several layers of options (Steinbach, Holcomb, Holmes, Devers, & Cannella, 2017). To diversify their holdings and avoid eventual option expiration, they must exercise options periodically. However, stock ownership policies often require CEOs to retain specific levels of stock in their firms over the long term (Shilon, 2015). Thus, their discretion to access value from stock can be limited relative to stock option exercise.

Independent Variable

Impression Offsetting. We measured *Impression Offsetting* as the count of material, positive announcements made by the focal firm in a firm-authored press release in the three-day period centered on the announcement of the acquisition (i.e., one day before and after) (Graffin et al., 2016). Our measure is thus tightly aligned with the definition of impression offsetting as being the intentional release of unrelated positive information surrounding an announcement. We use this narrow window for three primary reasons. First, for a news announcement to add information that attenuates the scrutiny a firm faces regarding an acquisition, the positive news has to occur in the same news cycle as the acquisition; going beyond a day around the acquisition violates this requirement. Second, a short window allows us to avoid situations in which the firm generates news announcements in response to how the market reacts to an acquisition announcement. Finally, our measure follows prior research on impression offsetting (Graffin et al., 2016). Thus, our measure allows us to stick to announcements made in the same news cycle and ensures that the firm is indeed planning on using the announcement as impression offsetting and allows us to be consistent with prior work in this area. Table 1 provides a summary of announcement types and their categorization.

Moderating Variables

CEO Age. We measured *CEO Age* as the age reported in ExecuComp for the firm's CEO in the year of the acquisition.

High Reputation. Following prior research, we measured *High Reputation* as a binary variable with a value of 1 for firms that were included on either *Fortune*'s Most Admired or the *Wall Street Journal*'s Corporate Reputation Survey, and a value of 0

[2] Some of the data used in this project were used in one of two other papers: Devers et al. (2013) and Graffin et al. (2016). Specifically, data on impression offsetting actions drew on data used by Graffin et al. (2016) while data on stock option exercises came from the same data set as the one used in Devers et al. (2013). Thus, the final data set for this project includes some data from each of these studies combined with additional data collected specifically for this study.

[3] CEOs often have options that have not yet vested, and are, therefore, unexercisable; thus, we do not include unexercisable options in the denominator for our dependent variable. Nevertheless, supplemental analyses using both exercisable and unexercisable options held, as the denominator returned results consistent with those presented.

TABLE 1
Categorization of Announcements

Positive (Impression Offsetting)	Other Material Announcements
Earnings releases (above expectations)	Earnings releases (at or below expectations)
Earnings guidance (above expectations)	Earnings guidance (at or below expectations)
Change in dividend rate (all observations are increases)	New executive or director
New product	Divestiture or plant closing
Customer win	Settlement of litigation or other legal dispute
Social good (e.g., donation, sponsorship)	Executive retirement
Received award from third party	Change of stock exchange listing
Capital return (i.e., buyback or stock split)	Debt issuance
Results of a sponsored study	Other acquisition
	Completion of another acquisition
	Recall or safety issue

otherwise (Boivie, Graffin, Gentry, 2016; Pfarrer, Pollock, & Rindova, 2010).[4]

Dynamism. We measured *Dynamism* by first regressing industry sales on a year counter variable with a five-year window such that the value for year t is calculated from a regression covering years $t-4$ through t. We then divided the standard error by the industry's mean sales, generating a variable that scales from 0 (i.e., perfect stability) upward (i.e., indicating greater dynamism) (Dess & Beard, 1984; McNamara et al., 2008).

Control Variables

As with our moderator variables that were assessed across multiple levels, we controlled for possible alternative explanations at the CEO, board, firm, industry, and acquisition levels.

CEO- and board-level controls. We included eight controls at the CEO and board levels of analyses. To account for the potential idiosyncratic differences in exercise behaviors among CEOs, we controlled for *CEO Prior Option Exercises*, which we measured using the same method as our *Subsequent Options Exercises* dependent variable, except that we measured this control in the quarter prior to our dependent variable. We also controlled for *CEO Total Compensation*, measured using ExecuComp's CEO total compensation variable (TDC1).[5] We controlled too for *CEO Pay Structure* to account for the incentive structure of CEO pay using the ratio of long-term pay to total pay (Carpenter & Sanders, 2002; Seo et al., 2015). To account for potential risk preference differences associated with gender (e.g., Jeong & Harrison, 2017), we controlled for *CEO Gender (Male)* recorded as a 1 for a male CEO and 0 for a female CEO. To control for the potential that CEO power may directly (e.g., general risk preferences) or indirectly (e.g., perceived ability to receive replacement awards) affect exercise decisions, we included *CEO Tenure* and *CEO Power*. CEO power was measured as the sum of the standardized values of four factors: (1) CEO duality, (2) the ratio of CEO ownership to board ownership, (3) the ratio of the number of directors appointed after the CEO's tenure began to the total number of directors, and (4) the proportion of outside directors to the total board size (Haynes & Hillman, 2010). Further, to account for attention given to monitoring the CEO, we controlled for *Busy Board*, which we recorded as a dummy variable indicating when 50% or more of the board's outside directors served on three or more boards (Chen, Crossland, & Huang, 2016). Finally, because the presence of female directors may increase the depth of monitoring discussions, we controlled for *Female Board Representation* measured as the percentage of females on the board (Chen et al., 2016).

Firm- and industry-level controls. We included six controls at the firm and industry levels of analysis. Firms adapt their behaviors as they gain experience in acquiring other firms (Haleblian, Kim, & Rajagopalan, 2006). Thus, we controlled for *Acquisition Experience*, which we measured as the count of acquisitions that met our sample specifications, described above,

[4] Like prior research, we use a combined list to keep a roughly equal number (i.e., 20–25) of high-reputation firms per year of the sample. In some years, the *Fortune* list alone has only 10 top firms.

[5] In supplemental analyses, we tested several alternative ways of controlling for CEOs' financial resource needs: (a) we split up cash and noncash compensation; (b) we used ExecuComp's TDC2 data item to capture the value of salary, annual bonus pay, other annual pay, restricted stock grants, long-term incentive plan payouts, all options exercised, and all other pay, which reflects the compensation actually received by a CEO in a given year; (c) total compensation received over the preceding three years (sum of TDC2 over prior three years); and (d) CEO relative pay calculated based on a comparison to similar peer firms following the analyses described in Seo et al. (2015). In each of these cases, the results were consistent with those presented.

for the three years prior to the focal acquisition (Haunschild & Beckman, 1998; Reuer, Tong, & Wu, 2012; Sanders, 2001). To account for the differential acquisition behaviors associated with the size and profitability of the acquirer (Haleblian et al., 2009), we controlled for *Firm Size* and *Net Income*. We measured *Firm Size* as the logged value of the acquiring firm's assets, and we measured *Net Income* as the acquiring firm's net income. Finally, to control for the potential influence of the relative volatility of the focal firm's stock, we controlled for *Annual* β, which we measured using the Scholes–Williams beta calculation from the Center for Research in Security Prices (Scholes & Williams, 1977). Firm acquisition behaviors may also be influenced by the relative prospects of the acquiring firm's industry. Accordingly, we controlled for *Munificence*, by taking the regression coefficients from the regressions we used for our *Dynamism* moderating variable and dividing those regression coefficients by the industry's mean sales (Dess & Beard, 1984; McNamara et al., 2008). A zero value indicated flat growth in the five-year window, and positive and negative values indicated positive or negative growth.

Acquisition-level controls. We included six controls at the acquisition level in our analyses. First, to partial out any influence that stock market reactions have on CEO exercising of stock options, we controlled for *Stock Market Reaction* to the acquisition announcement. We calculated stock market reactions using the cumulative abnormal return to the acquisition. Cumulative abnormal return was calculated by comparing the observed stock return with the predicted (or normal) return over the same time period (Haleblian et al., 2006; McNamara et al., 2008). To calculate the predicted return, we used a 250-day estimation period (approximately one year of trading days) from 295 days to 45 days before the acquisition (McNamara et al., 2008; Tian, Haleblian, & Rajagopalan, 2011). To ensure that our event window was wider than our window for impression offsetting announcements (allowing us to capture market reactions to both the acquisition and any offsetting announcements), we used an 11-day window from five days before the acquisition to five days after the acquisition (−5,5) (Cuypers, Cuypers, & Martin, 2017; Westphal & Zajac, 1998; Zajac & Westphal, 2004).[6]

Additionally, because the type of acquisition may also be associated with the confidence a CEO has in the acquisition, we controlled for *Hostile Acquisitions* and *Stock Consideration*, both of which have been found to be associated with market reactions to acquisition announcements (Browne & Rosengren, 1987; Devers et al., 2013; Schijven & Hitt, 2012; Seo et al., 2015). We measured Hostile Acquisitions using the attitude characterization in the SDC Platinum database. The variable was a dummy variable, with a 1 if the acquisition was a hostile takeover and 0 otherwise. We measured Stock Consideration as the percentage of the deal consideration paid by the acquiring firm in the form of its own stock. Since it is also possible that larger acquisition size will precipitate larger responses from the CEOs, we controlled for *Acquisition Size* based on the total value of the focal acquisition.

It also may be that material announcements other than those we categorized as positive could have an association with subsequent CEO option exercise behavior. Thus, following Graffin and colleagues (2016), we also controlled for announcements other than the announcements included in our impression offsetting variable. We measured *Other Material Announcements* as the count of material, non-positive announcements in a firm-authored press release within one day of the acquisition announcement (coinciding with our measure for impression offsetting). While impression offsetting announcements are clearly positive (such as new product introductions or positive earnings releases), our value for Other Material Announcements included any neutral or negative material announcements (such as the announcement of an executive retiring or neutral/negative earnings releases). We provide a more detailed comparison of impression offsetting announcements compared to other material announcements in Table 1.[7] To control for potential differential announcement behavior by the firm making the focal acquisition, we measured *Baseline Positive Announcements* to capture the firm's general tendency to issue positive material press releases. We used the same categorization as our *Impression Offsetting* independent variable over the timeframe between 121 days and 30 days prior to the focal

[6] We also tested a range of alternative windows, ranging from a three-day window (one day before to one day after the acquisition) to a 21-day window (five days before to 15 days after). Our results are robust to all of the windows tested.

[7] We found only four instances of negative announcements, and only one negative announcement that had a nonzero value on our dependent variable. Given this rarity, we elected to combine announcements that would be labeled as "neutral" or "negative," using the typology in Graffin et al. (2016), into our one *Other Material Announcements* measure.

acquisition announcement (again following Graffin et al., 2016). The final value for this measure was the average announcements per three (business)-day window, to match the three days used in measuring our independent variable.

Year dummy variables. Finally, we control for *year*—as a series of dummy variables—to account for macroeconomic influences that vary over time. These year controls are present in all of our models, though we omit them from our tables for clarity.

Analyses

Our observations were at the event level, with some acquiring firms making more than one acquisition in the sample. We used Tobit regression because our dependent variable, *Subsequent Options Exercises*, was a continuous variable with a lower bound of zero. Wooldridge (2009: 574) called these types of variables a "corner solution response" because a "nontrivial fraction of the population" would choose zero. In this case, many CEOs would choose to exercise zero options in a particular quarter. Tobit models are appropriate for dependent variables that are continuous and that are bounded from above, below, or both (Amemiya, 1984; Gamache, McNamara, Mannor, & Johnson, 2015; Wooldridge, 2009). We also used robust standard errors clustered by firm, as our observations, though not a panel, did include multiple observed acquisitions made by the same acquiring firm. Clustered robust standard errors correct for violations of the independence and homoscedasticity assumptions of ordinary least squares resulting from within-cluster (i.e., firm-level) correlation of observations and between-cluster differences in variances (Wooldridge, 2009). We also standardized all nonbinary variables before creating interaction terms and included all consecutive terms in our regression equations (Brambor, Clark, & Golder, 2006).

RESULTS

Table 2 presents the descriptive statistics and intercorrelations for our study. Table 3 presents the results of our analyses. Model 1 includes all control variables. As expected, many of our control variables are significant predictors of options exercised following an acquisition.

Hypothesis 1 predicted that impression offsetting surrounding an acquisition announcement would be positively associated with subsequent options exercises. In Model 2, we include our independent variable: impression offsetting. In both Models 2 and 6 (the full model with all interaction variables), the coefficient for impression offsetting is statistically significant and positive, $p < .001$, supporting Hypothesis 1. In practical terms, a CEO who makes three impression offsetting announcements around an acquisition will exercise 6.7% more options in the next quarter than a CEO of a firm that makes zero impression offsetting announcements around an acquisition. If the options a CEO exercises are at the mean value of their exercisable option holdings, this represents a difference in options exercised of about $220,000.[8,9]

In Models 3 to 5 of Table 3, we include our hypothesized moderator effects with the full model (Model 6) including all hypothesized associations. Hypothesis 2 predicted that the association between impression offsetting around an acquisition announcement and subsequent options exercises would be stronger for older CEOs. In Models 3 and 6, the coefficient for the interaction is statistically significant and positive, $p < .001$, providing evidence supporting Hypothesis 2. This interaction is presented graphically in Figure 1, showing a higher slope for the line representing a CEO age one standard deviation above the mean. A simple slopes analysis confirmed this: the slope of the line for high age ($+1$ *SD*) is positive, $p < .001$, while the slope of the line for low age (-1 *SD*) is negative, $p < .001$. In practical terms, for CEOs who make three impression offsetting announcements, higher age for a CEO (one standard deviation above the mean) is associated with the exercising of 27.62% more options compared to more youthful CEOs (one standard deviation below the mean), representing a difference of approximately $850,000 in options exercised at the mean value of exercisable options.

In Hypothesis 3, we predicted that the association between impression offsetting around an acquisition announcement and subsequent options exercises

[8] Naturally, we expect CEOs to exercise the options that are most valuable, so our calculations represent a conservative estimation of the difference in options exercised.

[9] In the full model (Model 6), the coefficient of impression on represents the effect of impression offsetting on subsequent acquisition activity conditional on the interaction terms being 0. Because we standardized all nondichotomous variables, this means that the coefficient for impression offsetting represents the effect of impression offsetting on subsequent acquisition activity conditional on the value of Dynamism and CEO Age being at their mean and High Reputation being 0 (non-high-reputation firms).

TABLE 2
Summary Statistics and Correlations

	Variables	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	CEO Prior Opt. Exercises (logged)	0.047	0.170	1														
2.	CEO Total Compensation	12265.431	16996.218	.184	1													
3.	CEO Pay Structure	0.681	0.221	.044	.395	1												
4.	CEO Gender (Male)	0.992	0.090	.025	.017	−.002	1											
5.	CEO Tenure	7.118	7.032	−.037	.149	−.005	.034	1										
6.	CEO Power	0.062	2.085	−.089	.081	.131	.000	.287	1									
7.	Busy Board	0.064	0.235	.023	.110	.053	.019	−.092	.022	1								
8.	Female Board Representation	0.122	0.076	−.065	.133	.150	−.090	−.054	.085	−.053	1							
9.	Acquisition Experience	1.049	1.922	−.024	.075	.053	.038	.065	.045	−.093	−.035	1						
10.	Firm Size (logged)	9.397	1.633	−.001	.308	.184	.056	−.036	.126	.015	.291	.307	1					
11.	Net Income	446.055	761.898	−.024	.352	.136	.033	−.060	.022	−.002	.242	.141	.633	1				
12.	Munificence	281.189	816.278	.017	.190	.050	.017	.021	.089	.037	.032	−.089	.157	.179	1			
13.	Annual β	1.132	2.142	.015	.001	.032	.004	−.043	−.098	−.029	.006	−.044	−.006	.080	−.021	1		
14.	Market Reaction	−0.020	0.073	−.024	.017	−.036	.049	−.036	.019	−.031	.023	.060	.111	.051	−.008	.002	1	
15.	Hostile Acquisition	0.027	0.161	−.031	−.003	−.051	.015	.042	.056	.012	.021	−.031	−.011	−.028	−.039	−.018	−.029	1
16.	Stock Consideration	48.208	43.576	.013	.035	.025	.048	.063	−.006	.041	−.100	.163	.084	−.117	−.081	−.064	−.123	−.067
17.	Acquisition Size	2788.320	6505.369	.003	.229	.096	.019	−.007	.064	.149	.076	−.074	.267	.295	.170	−.019	−.143	.057
18.	Other Material Announcements	0.116	0.363	−.030	.093	.024	−.096	−.061	−.033	−.061	.137	.261	.211	.170	.051	−.027	.011	−.053
19.	Baseline Positive Announcements	0.095	0.123	.049	.255	.077	−.062	−.026	−.040	−.021	.092	.009	.106	.104	.040	−.002	.010	−.025
20.	CEO Age	56.022	5.883	.022	.095	−.061	.089	.411	.210	−.057	−.006	−.054	.161	.178	.090	−.077	.020	.097
21.	High Reputation	0.055	0.228	.016	.235	.061	.022	−.050	−.091	−.021	.122	.068	.108	.261	.022	−.002	.049	−.040
22.	Dynamism	0.030	0.023	.032	.006	.065	.019	.050	−.019	.015	−.087	.023	.026	−.050	.012	.065	.057	.006
23.	Impression Offsetting	0.479	1.122	−.030	.206	.073	−.042	.046	.057	−.050	.141	.111	.218	.382	.044	−.025	.058	.020
24.	Subsequent Options Exercises (logged)	0.057	0.206	.267	.024	−.020	.025	−.081	−.002	.062	−.095	−.065	−.061	−.054	−.033	.053	−.005	.084

	Variables	16	17	18	19	20	21	22	23	24
16.	Stock Consideration	1								
17.	Acquisition Size	.173	1							
18.	Other Material Announcements	.017	.045	1						
19.	Baseline Positive Announcements	.016	.124	−.005	1					
20.	CEO Age	.019	.120	.016	−.049	1				
21.	High Reputation	−.008	−.041	.095	.170	.014	1			
22.	Dynamism	.102	−.008	.011	−.100	.064	−.046	1		
23.	Impression Offsetting	−.162	−.012	.084	.252	.039	.104	−.095	1	
24.	Subsequent Options Exercises (logged)	−.061	−.011	−.040	.032	−.007	−.027	.034	−.034	1

Notes: $n = 491$. Correlations greater than .088 or less than −.088 are significant at $p < .05$.

TABLE 3
Effects of Impression Offsetting on Subsequent Option Exercises

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Constant	−3.1475***	−3.1531***	−3.1368***	−3.1457***	−3.1140***	−3.0953***
	(0.0204)	(0.0203)	(0.0203)	(0.0203)	(0.0201)	(0.0201)
Controls						
CEO Prior Opt. Exercises	0.0782***	0.0789***	0.0804***	0.0794***	0.0790***	0.0813***
	(0.0021)	(0.0021)	(0.0020)	(0.0021)	(0.0021)	(0.0021)
CEO Total Compensation	0.0354***	0.0326***	0.0280***	0.0315***	0.0394***	0.0340***
	(0.0066)	(0.0067)	(0.0067)	(0.0070)	(0.0068)	(0.0071)
CEO Pay Structure	0.0021	0.0041	0.0057	0.0041	0.0046	0.0065
	(0.0052)	(0.0051)	(0.0050)	(0.0051)	(0.0052)	(0.0050)
CEO Gender (Male)	2.8208***	2.8336***	2.8126***	2.8283***	2.8161***	2.7958***
	(0.0204)	(0.0203)	(0.0203)	(0.0203)	(0.0201)	(0.0201)
CEO Tenure	−0.0363***	−0.0401***	−0.0434***	−0.0406***	−0.0326***	−0.0361***
	(0.0053)	(0.0053)	(0.0051)	(0.0053)	(0.0056)	(0.0054)
CEO Power	0.0636***	0.0627***	0.0650***	0.0626***	0.0612***	0.0636***
	(0.0048)	(0.0048)	(0.0047)	(0.0048)	(0.0048)	(0.0048)
Busy Board	0.0149***	0.0148***	0.0154***	0.0151***	0.0153***	0.0165***
	(0.0034)	(0.0033)	(0.0033)	(0.0033)	(0.0034)	(0.0034)
Female Board Representation	−0.0248***	−0.0251***	−0.0243***	−0.0241***	−0.0235***	−0.0218***
	(0.0048)	(0.0048)	(0.0049)	(0.0048)	(0.0049)	(0.0050)
Acquisition Experience	−0.0599***	−0.0623***	−0.0627***	−0.0601***	−0.0617***	−0.0600***
	(0.0054)	(0.0055)	(0.0055)	(0.0054)	(0.0055)	(0.0054)
Firm Size	−0.0086	−0.0087	−0.0099	−0.0082	−0.0073	−0.0073
	(0.0075)	(0.0077)	(0.0075)	(0.0077)	(0.0077)	(0.0077)
Net Income	0.0306***	0.0208*	0.0249**	0.0192*	0.0202*	0.0218*
	(0.0082)	(0.0086)	(0.0086)	(0.0091)	(0.0086)	(0.0090)
Munificence	−0.0462***	−0.0441***	−0.0452***	−0.0459***	−0.0536***	−0.0583***
	(0.0057)	(0.0057)	(0.0057)	(0.0058)	(0.0059)	(0.0062)
Annual β	0.0461***	0.0476***	0.0469***	0.0471***	0.0478***	0.0467***
	(0.0023)	(0.0023)	(0.0024)	(0.0024)	(0.0024)	(0.0024)
Stock Market Reaction	−0.0108***	−0.0107***	−0.0091***	−0.0118***	−0.0128***	−0.0126***
	(0.0023)	(0.0023)	(0.0023)	(0.0024)	(0.0023)	(0.0024)
Hostile Acquisition	0.1748***	0.1713***	0.1654***	0.1698***	0.1920***	0.1863***
	(0.0163)	(0.0163)	(0.0162)	(0.0163)	(0.0166)	(0.0165)
Stock Consideration	−0.0668***	−0.0639***	−0.0649***	−0.0656***	−0.0571***	−0.0594***
	(0.0047)	(0.0047)	(0.0047)	(0.0046)	(0.0049)	(0.0048)
Acquisition Size	−0.0194***	−0.0163***	−0.0156***	−0.0151***	−0.0168***	−0.0147***
	(0.0040)	(0.0040)	(0.0040)	(0.0041)	(0.0041)	(0.0042)
Other Material Announcements	−0.0001	−0.0004	0.0002	−0.0030	0.0008	−0.0015
	(0.0048)	(0.0048)	(0.0048)	(0.0051)	(0.0047)	(0.0050)
Baseline Positive Announcements	0.2991***	0.2530***	0.3118***	0.2510***	0.2340***	0.2974***
	(0.0633)	(0.0641)	(0.0634)	(0.0655)	(0.0643)	(0.0644)
CEO Age	−0.0096†	−0.0078	−0.0010	−0.0079	−0.0114*	−0.0040
	(0.0053)	(0.0053)	(0.0055)	(0.0054)	(0.0054)	(0.0056)
High Reputation	−0.1720***	−0.1692***	−0.1743***	−0.2008***	−0.1866***	−0.2258***
	(0.0219)	(0.0221)	(0.0216)	(0.0310)	(0.0219)	(0.0286)
Dynamism	−0.0021	−0.0006	−0.0005	−0.0006	0.0145***	0.0161***
	(0.0023)	(0.0024)	(0.0024)	(0.0024)	(0.0028)	(0.0029)
Interactions						
CEO Age × Impression Offsetting			0.0471***			0.0541***
			(0.0046)			(0.0059)
High Reputation × Impression Offsetting				0.0817***		0.0917***
				(0.0245)		(0.0242)
Dynamism × Impression Offsetting					0.0900***	0.0992***
					(0.0064)	(0.0069)
Independent Variable						
Impression Offsetting		0.0319***	0.0110†	0.0283***	0.0507***	0.0243***
		(0.0049)	(0.0058)	(0.0055)	(0.0052)	(0.0072)
Probability > *F*	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Notes: $n = 491$ for each model. Clustered standard errors in parentheses. Year dummy variables included, but omitted from the tables.

† $p < .1$
* $p < .05$
** $p < .01$
*** $p < .001$

would be stronger for firms with high reputations. In both Models 4 and 6, the coefficient for the interaction is statistically significant and positive, $p < .001$, supporting Hypothesis 3. This interaction is graphed in Figure 2, showing a higher slope for the line representing a firm with high reputation. A simple slopes analysis confirmed the graphical representation: the slope of the line for high-reputation

FIGURE 1
Offsetting and CEO Age Interaction

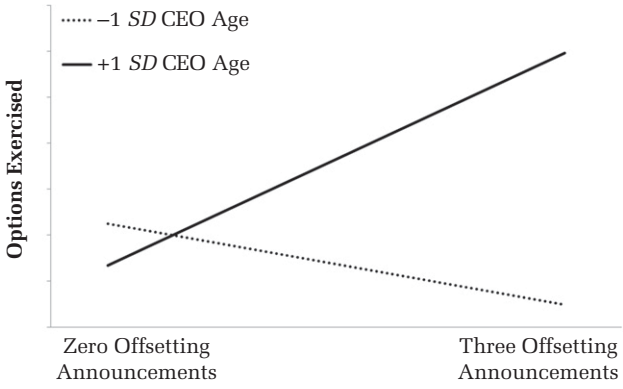
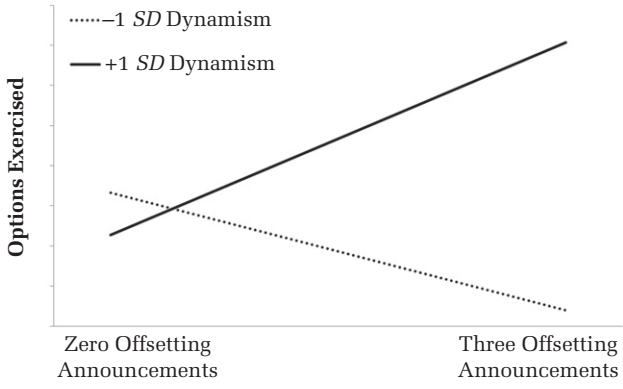


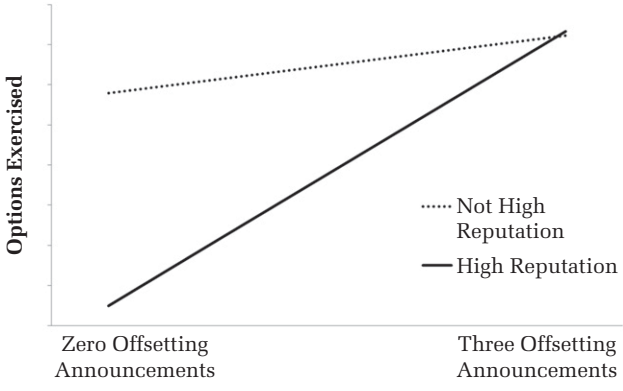
FIGURE 3
Offsetting and Dynamism Interaction



firms is positive, $p < .001$, while the slope of the line for not-high-reputation firms is not significant, $p > .05$. Thus, CEOs who are in high-reputation firms appear hesitant to exercise options if they have not also issued impression offsetting announcements. In fact, after announcing an acquisition, CEOs of high-reputation firms exercise approximately 10% of the option value that CEOs of other firms exercise when the firm makes zero impression offsetting announcements. At the mean of exercisable options, this translates to a difference of nearly $3M.

Hypothesis 4 predicted that the association between impression offsetting around an acquisition announcement and subsequent stock options exercised by the CEO would be stronger for firms facing highly dynamic industry conditions. In both Models 5 and 6, the coefficient for the interaction is statistically significant and positive, $p < .001$, providing evidence for Hypothesis 4. This interaction is presented graphically in Figure 3, showing a higher slope for the line representing a firm in an industry with dynamism one standard deviation above the mean. A simple slopes analysis confirmed the graphical representation: the slope of the line for high dynamism (+1 *SD*) is positive, $p < .001$, while the slope of the line for low dynamism (−1 *SD*) is negative, $p < .001$. In this case, among firms making three offsetting announcements, CEOs in highly dynamic industries (one standard deviation above the mean) exercise 61.3% more options than CEOs in less dynamic industries (one standard deviation below the mean) representing a difference of approximately $1.7M in options exercised (assuming the mean value of exercisable options).

FIGURE 2
Offsetting and Firm Reputation Interaction



Influence of Generalized Overconfidence

A central point in our theory is that CEOs will use impression offsetting when they have low confidence in the long-term value potential of their acquisitions. Our focus here has been on the situation-specific confidence that a CEO has toward a specific acquisition. Other work, however, has suggested that some CEOs have a high level of generalized (or trait) overconfidence (e.g., Campbell et al., 2011; Hayward & Hambrick, 1997; Malmendier & Tate, 2005). By focusing on situation-specific confidence, our underlying assumption has been that, regardless of a CEO's trait level of overconfidence, when they make an acquisition based on self-interested motives, they will be less confident in that acquisition than they would have been otherwise.

To confirm that our hypothesized association is not merely capturing differences in CEO generalized overconfidence, we conducted supplement analysis in which we controlled for trait overconfidence in two ways. First, we measured CEO overconfidence

following a measure used by Hayward and Hambrick (1997) and calculating the CEO's total compensation divided by the compensation of the second-highest paid executive. We used this measure instead of our control for CEO total compensation in our model (to avoid including the same variable twice). Second, we also incorporated a measure of overconfidence, following the work of Malmendier and Tate (2005, 2008) and Campbell and colleagues (2011). This measure is based on the premise that executives "typically hold undiversified portfolios and should exercise options early if they are rational expected utility maximizers" (Campbell et al., 2011: 700). A CEO is believed to be overconfident if they hold exercisable stock options for which the stock price exceeds the exercise price by 100% or more. Thus, a CEO who holds exercisable options at 100% or more in the money for two years in our sample was classified as overconfident, beginning with the first year they exhibited this behavior (Campbell et al., 2011; Chen et al., 2015; Galasso & Simcoe, 2011).

We then reran our analyses with these two measures of trait overconfidence included. We found results consistent with our initial analyses and supporting our hypotheses. Thus, even after accounting for a CEO's trait level of overconfidence, we can conclude that impression offsetting around an acquisition is positively related to subsequent options exercised in the period following the acquisition announcement. This provides additional support for our assertion that CEOs use impression offsetting when their confidence in the value-creation potential of the acquisition is low. Further, both of the measures of trait overconfidence are negative and statistically significant predictors of subsequent options exercised, $p < .001$. This is as we would expect and consistent with prior research indicating that options exercised is an *ex post* behavioral outcome of confidence in the long-term value-creating potential of the acquisition.

Accounting for Potential Endogeneity

Although our primary models included many relevant control variables, it is still possible that some unknown omitted variable could influence both impression offsetting and subsequent exercising of stock options. We took two steps to account for the potential of endogeneity biasing our findings due to omitted variable bias. First, we used a two-stage residual inclusion Tobit model (Hausman, 1978), wherein the first stage uses negative binomial regression to predict the number of impression offsetting announcements. We used average top management team total compensation and acquisition unrelatedness as instruments, which have previously been used as instruments or independent variables for impression offsetting (Graffin et al., 2016) but are both theoretically and empirically unrelated to the subsequent exercising of stock options. The second stage then included all predictor variables plus the residuals from the first stage, creating a treatment effects regression. The results of the two-stage analysis are fully consistent with those presented.

Second, we tested for the *Impact Threshold of a Confounding Variable* (ITCV). The "impact threshold of a confounding variable" test allowed us to calculate how strongly correlated an omitted variable would have to be in order to change our results (Busenbark et al., 2017; Frank, 2000; Harrison, Boivie, Sharp, & Gentry, 2018; Hubbard, Christensen, & Graffin, 2017). The results of this test indicated that an omitted variable would need to be correlated at .274 with both our independent variable (impression offsetting) and our dependent variable (subsequent options exercises) to overturn our findings. Based on the correlations in our study, between these two variables and our control variables, it appears highly unlikely that an omitted variable would exhibit a correlation of that magnitude. The strongest correlated variable with impression offsetting is net income, $r = .382$, which is only correlated at $r = -.054$ with subsequent options exercised. Similarly, the strongest correlated variable with subsequent options exercised is prior options exercised, $r = .267$, which is only correlated at $r = -.030$ with impression offsetting. Thus, this pattern of findings suggests it is unlikely that an unmeasured variable would be correlated strongly with both key variables.

Potential Influence of Ratio Measure for Dependent Variable

To be consistent with prior research, we used a ratio for our dependent variable. We recognize, however, that some have expressed concern over the use of ratios as dependent variables (Wiseman, 2010). To alleviate this potential concern, we conducted supplemental analyses using the number of options exercised by the CEO in the quarter following the focal acquisition (logged) as our dependent variable and controlling for the number of exercisable options held by the CEO at the same point in time, and using the same set of controls as our

primary analysis. Again, the results from these additional analyses are consistent with those reported.

DISCUSSION

Scholars and regulators have long recognized that CEOs often pursue actions for reasons other than the creation of shareholder value (Berle & Means, 1932). It is in the interest of shareholders, however, to understand when CEOs are championing efforts they believe will generate value for shareholders versus when they are undertaking actions for their own benefits or due to social pressures (Dalton, Hitt, Certo, & Dalton, 2007; Devers, Cannella, Reilly, & Yoder, 2007). Our study addresses this important concern by exploring a potential early warning signal for when CEOs have low confidence in the long-term value potential of their strategic actions: impression offsetting.

Scholars recently identified a behavioral outcome associated with low CEO confidence in the value-creation potential of an announced acquisition (Devers et al., 2013). Building on work that suggests CEO confidence in the firm's prospects for future growth can be gleaned from their personal equity actions (e.g., Malmendier & Tate, 2005), Devers and colleagues (2013) found that acquiring CEOs systematically exercised options in the quarters following acquisitions, demonstrating low confidence in their own acquisitions. This research provides an *ex post* means to determine when a CEO acted primarily in their self-interest or in response to social pressures.

In this study, we drew on AIM research (Graffin et al., 2016; Graffin et al., 2011) to advance impression offsetting as an *ex ante* means of assessing whether or not CEOs appear to have confidence in their acquisitions. We theorized acquiring CEOs are likely to use impression offsetting to reduce scrutiny when they primarily acquire either for self-interested reasons or due to social pressures. In these situations, impression offsetting can serve to protect the value of CEO compensation and firm equity stakes, and reduce the potential for public criticism. Using option exercises as an *ex post* proxy for low CEO confidence in an acquisition, our results reveal that impression offsetting around an acquisition announcement is positively associated with the percentage of stock options exercised by the CEO in the period following the announcement. Further, this relationship is stronger in contexts where CEOs are likely to experience greater downside risk salience. These findings suggest impression offsetting around acquisition announcements is a novel and useful signal that a CEO may be undertaking an acquisition in which they have low confidence.

In this way, our paper provides a unique and valuable addition to research examining signals investors use for understanding firm actions and predicting firm outcomes. Prior research in related fields has discussed the value of identifying early signals of desired behaviors that can only be fully observed later. For example, in the organizational behavior literature, research has examined the relationship between job embeddedness and turnover. Embeddedness actions signal a person's intention to commit to an organization and can be seen in observable behavior (e.g., joining more teams, making friendships at work, mentoring others) early in a person's tenure at the organization. In turn, embeddedness has been shown to be related to a reduced likelihood of turnover (an *ex post* measure of behavioral commitment to an organization) in a number of studies (Jiang, Liu, McKay, Lee, & Mitchell, 2012; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). Our findings extend this logic to the strategy field and suggest impression offsetting is a signal that can unintentionally inform investors of the motives of CEOs undertaking acquisitions. Thus, impression offsetting may serve as a valuable signal not only to interpret the potential long-term value of a specific deal but also to provide insights into the broader motives of firm leaders.

Our results, therefore, make several contributions to management research. First, our work suggests that impression offsetting is an *ex ante* signal that a CEO may have low confidence in the value-creation potential of an acquisition. This early warning signal is particularly valuable for investors looking to understand patterns of firm action. This contribution also relates to the obvious practical implication of our work—that investors can use impression offsetting surrounding an acquisition as a signal that it may not be in the best interest of shareholders. Thus, when an acquisition announcement is accompanied by other unrelated announcements, investors should closely examine the value potential of the deal. Second, prior research has largely ignored why organizational leaders engage in impression management activities around some strategic announcements but not others. Thus, our theory and findings contribute to this research by suggesting a motivation for why CEOs engage in this activity. It appears that, in the context of acquisitions, CEOs engage in impression offsetting when they have low confidence in the value-creation potential of that action. By making such a link, our

study provides a better understanding of why firms engage in impression offsetting.

Our study also offers insights to signaling theory and provides a wide range of future research opportunities. Signaling theory (Spence, 1973) provides an analytical framework to explain how exchange parties communicate unobservable quality through observable characteristics. Strategy scholars have built on the signaling framework to analyze how a firm's underlying quality can be translated into market signals shaping the firm's market valuation (e.g., Belogolovsky & Bamberger, 2014; Certo, 2003; Certo, Covin, Daily, & Dalton, 2001; Higgins & Gulati, 2006; Zhang & Wiersema, 2009). This research has primarily focused on intentional signals that executives send, but, in the present study, we find evidence of an unintended signal that executives appear to be sending—that they lack confidence in an acquisition—with their use of impression offsetting. Thus, our work has the potential to add a new stream to signaling theory on this and other unintended signals sent through impression management tactics.

Similarly, our findings offer potential insight into the behavioral drivers of organization action. One of the unknowns in behavioral research is how the behavioral triggers that lead to organizational actions influence the degree of confidence managers have in these actions. Our findings offer a means to assess the degree of confidence CEOs have in a range of actions that may be driven by behavioral processes. For example, future research could examine whether actions that arise from problemistic versus slack search lead to different reliance on impression offsetting. Similarly, research could examine whether acquisitions driven by a firm's proactive search efforts or in response to social pressures, such as during merger and acquisition waves (Haleblian et al., 2012), differ in the degree to which managers use impression offsetting. Such lines of examination could offer insight on how different acquisition drivers influence the confidence management evidence.

Our findings also contribute to research on corporate reputation (for a review, see Lange et al., 2011). Our analysis indicates a statistically significant negative main effect of high reputation on exercising options following an acquisition combined with the positive interaction effect of high reputation and impression offsetting. These findings suggest that the visibility and attention a firm gains as a result of a high reputation (Rhee & Haunschild, 2006; Zavyalova et al., 2016) make the CEO hesitant to exercise options following an acquisition announcement—unless, of course, they engaging in impression offsetting. Interestingly, this suggests that CEOs are concerned about the scrutiny they are under when they lead a high-reputation firm; however, they believe that, by using impression offsetting, they can effectively reduce the scrutiny enough that they feel free to exercise options. Essentially, in spite of the attention that high-reputation firms receive, by using impression offsetting, CEOs of high-reputation firms appear willing to undertake acquisitions in which they have low confidence.

Our work provides several additional avenues for future research. First, while we believe option exercise is the best available proxy of CEO confidence and is well grounded in the literature (e.g., Devers et al., 2013; Malmendier & Tate, 2005, 2008), future research could further examine this issue. Since investors and other firm stakeholders are likely to be interested in understanding the degree of confidence CEOs have in actions they are championing, future research could examine alternative unobtrusive measures of CEO confidence and compare their relative strength as signals of confidence. This could include research from field data as well as experimental data that could compare survey-based measures of confidence with behavioral signals of confidence.

Second, researchers could extend our work beyond the acquisition context. While we expect that CEOs are likely to use impression offsetting in similar ways around other major strategic actions, future research could explore other contexts to provide boundary conditions for our theory. For example, it might be interesting for corporate governance researchers to explore the use of impression offsetting around announcements of increases to executives' compensation or amplified CEO power. Indeed, it may be that CEOs will use impression offsetting or other forms of AIM (e.g., strategic noise; Graffin et al., 2011) to lessen the scrutiny they will face when they exercise options or alter their relationships with their boards. Thus, future research could explore the conditions under which CEOs engage in these practices surrounding these and other governance-related actions.

It also may be interesting for researchers to explore additional moderators to the association between impression offsetting surrounding an acquisition and subsequent exercising of stock options. In our paper, we limited our focus to situations in which the CEO was likely to be particularly salient of downside risk potential, giving them additional motivation to reduce scrutiny on the acquisition and to protect their position with the firm. One particularly interesting avenue in this vein could be to integrate upper echelons theory (Hambrick, 2007; Hambrick & Mason, 1984) and

the use of impression offsetting. In our work, we find that CEO age is an important moderator, with the association between impression offsetting and the exercising of stock options being stronger for older CEOs. It may be, however, that some CEO personality characteristics also increase or decrease the likelihood of using impression offsetting when the CEO acquires for self-interested reasons. For example, it could be that CEOs high in narcissism (Chatterjee & Hambrick, 2007) desire that attention is focused on them and don't want to reduce scrutiny on them, making them reticent to use impression offsetting even when they are acquiring for self-interested reasons or due to social pressures. By contrast, CEOs with a high prevention focus (Gamache et al., 2015) or utilizing a low construal level (Steinbach, Gamache, & Johnson, 2018) may be particularly keen on avoiding scrutiny of an acquisition and may be more likely to use impression offsetting regardless of whether their confidence about the value-creation potential of their acquisitions is low or high.

Finally, consistent with recent governance scholarship (Boivie et al., 2016a), our research suggests a skeptical view of the effectiveness of corporate governance at limiting CEO self-interested behavior. CEOs appear to have adjusted their behavior to governance mechanisms by using impression offsetting to help reduce scrutiny when they pursue self-interested gains. Market participants would be well advised to use this early warning signal to bid down acquisitions in which impression offsetting is used. More broadly, compensation and governance scholars would benefit by continuing to study ways to reduce the likelihood that CEOs act for personal gain, or in response to social pressures, at the expense of long-term firm value. Finally, research could also explore additional governance mechanisms, which may help to reduce the propensity of CEOs to engage in strategic actions for self-interested motivations.

CONCLUSION

Although research has shown that AIM techniques, such as impression offsetting, can effectively shape investor reactions, this work has not yet explored the motivations behind these tactics (Graffin et al., 2011; Graffin et al., 2016). By demonstrating a positive association between impression offsetting around acquisition announcements to subsequent CEO option exercises, our findings suggest CEOs use impression offsetting when they have low confidence in the value-creation potential of those deals. As such, although impression offsetting is effective at reducing negative market reactions to acquisition announcements (Graffin et al., 2016), this effect is ironic, in that it is used when investors should be most skeptical. We suspect that, while investors independently and rationally consider each piece of firm information in isolation, our findings suggest they are likely better served by examining the full collection of announcements made by a firm. Thus, impression offsetting can be a valuable signal of managerial intentions, but it is a signal that should be assessed in light of other signals the firm is producing and actions the firm is taking.

REFERENCES

Amemiya, T. 1984. Tobit models: A survey. ***Journal of Econometrics***, 24: 3–61.

Bansal, P., & Clelland, I. 2004. Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. ***Academy of Management Journal***, 47: 93–103.

Bebchuk, L. A., & Fried, J. M. 2003. Executive compensation as an agency problem. ***Journal of Economic Perspectives***, 17: 71–92.

Bednar, M. K. 2012. Watchdog or lapdog? A behavioral view of the media as a corporate governance mechanism. ***Academy of Management Journal***, 55: 131–150.

Belogolovsky, E., & Bamberger, P. A. 2014. Signaling in secret: Pay for performance and the incentive and sorting effects of pay secrecy. ***Academy of Management Journal***, 57: 1706–1733.

Berle, A. A., & Means, G. C. 1932. ***The modern corporation and private property***. Harcourt, NY: Brace & World.

Blankespoor, E., & deHaan, E. 2015. ***CEO visibility: Are media stars born or made?*** (Rock Center for Corporate Governance at Stanford University working paper no. 204). Retrieved from https://ssrn.com/abstract=2577994

Bliss, R. T., & Rosen, R. J. 2001. CEO compensation and bank mergers. ***Journal of Financial Economics***, 61: 107–138.

Bloom, M., & Milkovich, G. T. 1998. Relationships among risk, incentive pay, and organizational performance. ***Academy of Management Journal***, 41: 283–297.

Boivie, S., Bednar, M. K., Aguilera, R. V., & Andrus, J. L. 2016a. Are boards designed to fail? The implausibility of effective board monitoring. ***Academy of Management Annals***, 10: 319–407.

Boivie, S., Graffin, S. D., & Gentry, R. J. 2016b. Understanding the direction, magnitude, and joint effects

of reputation when multiple actors' reputations collide. ***Academy of Management Journal***, 59: 188–206.

Brambor, T., Clark, W. R., & Golder, M. 2006. Understanding interaction models: Improving empirical analyses. ***Political Analysis***, 14: 63–82.

Bromiley, P. 1991. Testing a causal model of corporate risk taking and performance. ***Academy of Management Journal***, 34: 37–59.

Brooks, M. E., Highhouse, S., Russell, S. S., & Mohr, D. C. 2003. Familiarity, ambivalence, and firm reputation: Is corporate fame a double-edged sword? ***Journal of Applied Psychology***, 88: 904–914.

Browne, L. E., & Rosengren, E. S. 1987. Are hostile takeovers different? In L. E. Browne & E. S. Rosengren (Eds.), ***The merge boom***: 199–229. Boston, MA: Federal Reserve Bank.

Busenbark, J. R., Lange, D., & Certo, S. T. 2017. Foreshadowing as impression management: Illuminating the path for security analysts. ***Strategic Management Journal***, 38: 2486–2507.

Campbell, T. C., Gallmeyer, M., Johnson, S. A., Rutherford, J., & Stanley, B. W. 2011. CEO optimism and forced turnover. ***Journal of Financial Economics***, 101: 695–712.

Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. 2004. Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. ***Journal of Management***, 30: 749–778.

Carpenter, M. A., & Sanders, W. G. 2002. Top management team compensation: The missing link between CEO pay and firm performance? ***Strategic Management Journal***, 23: 367–375.

Certo, S. T. 2003. Influencing initial public offering investors with prestige: Signaling with board structures. ***Academy of Management Review***, 28: 432–446.

Certo, S. T., Covin, J. G., Daily, C. M., & Dalton, D. R. 2001. Wealth and the effects of founder management among IPO-stage new ventures. ***Strategic Management Journal***, 22: 641–658.

Chatterjee, A., & Hambrick, D. C. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. ***Administrative Science Quarterly***, 52: 351–386.

Chen, G., Crossland, C., & Huang, S. 2016. Female board representation and corporate acquisition intensity. ***Strategic Management Journal***, 37: 303–313.

Chen, G., Crossland, C., & Luo, S. 2015. Making the same mistake all over again: CEO overconfidence and corporate resistance to corrective feedback. ***Strategic Management Journal***, 36: 1513–1535.

Christensen, C. M., Alton, R., Rising, C., & Waldeck, A. 2011. The big idea: The new M&A playbook. ***Harvard Business Review***, 89: 48–57.

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. 2011. Signaling theory: A review and assessment. ***Journal of Management***, 37: 39–67.

Cormier, D., Houle, S., & Ledoux, M.-J. 2013. The incidence of earnings management on information asymmetry in an uncertain environment: Some Canadian evidence. ***Journal of International Accounting, Auditing & Taxation***, 22: 26–38.

Cuypers, I. R., Cuypers, Y., & Martin, X. 2017. When the target may know better: Effects of experience and information asymmetries on value from mergers and acquisitions. ***Strategic Management Journal***, 38: 609–625.

D'Aveni, R. A. 1994. ***Hypercompetition***. New York, NY: Free Press.

Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. 2007. The fundamental agency problem and its mitigation: Independence, equity, and the market for corporate control. ***Academy of Management Annals***, 1: 1–64.

Datta, S., Iskandar-Datta, M., & Raman, K. 2001. Executive compensation and corporate acquisition decisions. ***Journal of Finance***, 56: 2299–2336.

Datta, D. K., Pinches, G. E., & Narayanan, V. 1992. Factors influencing wealth creation from mergers and acquisitions: A meta-analysis. ***Strategic Management Journal***, 13: 67–84.

Davis, G. F. 2005. New directions in corporate governance. ***Annual Review of Sociology***, 31: 143–162.

Delong, G., & Deyoung, R. 2007. Learning by observing: Information spillovers in the execution and valuation of commercial bank M&As. ***Journal of Finance***, 62: 181–216.

Dess, G. G., & Beard, D. W. 1984. Dimensions of organizational task environments. ***Administrative Science Quarterly***, 29: 52–73.

Devers, C. E., Cannella, A. A., Reilly, G. P., & Yoder, M. E. 2007. Executive compensation: A multidisciplinary review of recent developments. ***Journal of Management***, 33: 1016–1072.

Devers, C. E., McNamara, G., Haleblian, J., & Yoder, M. E. 2013. Do they walk the talk? Gauging acquiring CEO and director confidence in the value creation potential of announced acquisitions. ***Academy of Management Journal***, 56: 1679–1703.

Devers, C. E., McNamara, G., Wiseman, R., & Arrfelt, M. 2008. Moving closer to the action: Examining compensation design effects on firm risk. ***Organization Science***, 19: 548–566.

Elliott, J. A., & Shaw, W. H. 1988. Write-offs as accounting procedures to manage perceptions. ***Journal of Accounting Research***, 26: 91–119.

Elsbach, K. D. 1994. Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts. ***Administrative Science Quarterly***, 39: 57–88.

Elsbach, K. D. 2003. Organizational perception management. ***Research in Organizational Behavior***, 25: 297–332.

Elsbach, K. D. 2006. ***Organizational perception management***. Mahwah, NJ: Lawrence Erlbaum.

Elsbach, K. D. 2012. A framework for reputation management over the course of evolving controversies. In M. L. Barnett & T. G. Pollock (Eds.), ***The Oxford handbook of corporate reputation***: 466–286. Oxford, U.K.: Oxford University Press.

Elsbach, K. D., Sutton, R. I., & Principe, K. E. 1998. Averting expected challenges through anticipatory impression management: A study of hospital billing. ***Organization Science***, 9: 68–86.

Evans, D. 2016, April 19. Failed CEOs truly can have it all. ***New York***. Retrieved from https://www.thecut.com/2016/04/marissa-mayer-buyout-package-have-it-all.html

Farrell, K., & Whidbee, D. 2002. Monitoring by the financial press and forced CEO turnover. ***Journal of Banking & Finance***, 26: 2249–2276.

Finkelstein, S., Hambrick, D. C., & Cannella, A. A. 2009. ***Strategic leadership: Theory and research on executives, top management teams, and boards***. New York, NY: Oxford University Press.

Fombrun, C. 1996. ***Reputation: Realizing value from the corporate image***. Boston, MA: Harvard Business School Press.

Frank, K. A. 2000. Impact of a confounding variable on a regression coefficient. ***Sociological Methods & Research***, 29: 147–194.

Galasso, A., & Simcoe, T. S. 2011. CEO overconfidence and innovation. ***Management Science***, 57: 1469–1484.

Gamache, D. L., McNamara, G., Mannor, M., & Johnson, R. E. 2015. Motivated to acquire? The impact of CEO regulatory focus on firm acquisitions. ***Academy of Management Journal***, 58: 1261–1282.

Gomez-Mejia, L., & Wiseman, R. M. 1997. Reframing executive compensations: An assessment and outlook. ***Journal of Management***, 23: 291–374.

Graffin, S. D., Carpenter, M. A., & Boivie, S. 2011. What's all that (strategic) noise? Anticipatory impression management in CEO succession. ***Strategic Management Journal***, 32: 748–770.

Graffin, S., Haleblian, J., & Kiley, J. T. 2016. Ready, aim, acquire: Impression offsetting and acquisitions. ***Academy of Management Journal***, 59: 232–252.

Greenwood, R., & Schor, M. 2009. Investor activism and takeovers. ***Journal of Financial Economics***, 92: 362–375.

Greve, H. R. 2003. A behavioral theory of R&D expenditures and innovations: Evidence from shipbuilding. ***Academy of Management Journal***, 46: 685–702.

Grinstein, Y., & Hribar, P. 2004. CEO compensation and incentives: Evidence from M&A bonuses. ***Journal of Financial Economics***, 73: 119–143.

Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. 2009. Taking stock of what we know about mergers and acquisitions: A review and research agenda. ***Journal of Management***, 35: 469–502.

Haleblian, J., Kim, J. Y. J., & Rajagopalan, N. 2006. The influence of acquisition experience and performance on acquisition behavior: Evidence from the U.S. commercial banking industry. ***Academy of Management Journal***, 49: 357–370.

Haleblian, J. J., McNamara, G., Kolev, K., & Dykes, B. J. 2012. Exploring firm characteristics that differentiate leaders from followers in industry merger waves: A competitive dynamics perspective. ***Strategic Management Journal***, 33: 1037–1052.

Haleblian, J. J., Pfarrer, M. D., & Kiley, J. T. 2017. High-reputation firms and their differential acquisition behaviors. ***Strategic Management Journal***, 38: 2237–2254.

Hambrick, D. C. 2007. Upper echelons theory: An update. ***Academy of Management Review***, 32: 334–343.

Hambrick, D. C., Finkelstein, S., & Mooney, A. C. 2005. Executive job demands: New insights for explaining strategic decisions and leader behaviors. ***Academy of Management Review***, 30: 472–491.

Hambrick, D. C., & Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. ***Academy of Management Review***, 9: 193–206.

Harford, J., & Li, K. 2007. Decoupling CEO wealth and firm performance: The case of acquiring CEOs. ***Journal of Finance***, 62: 917–949.

Harrison, J. S., Boivie, S., Sharp, N., & Gentry, R. 2018. Saving face: How exit in response to negative press and star analyst downgrades reflects reputation maintenance by directors. ***Academy of Management Journal***, 61: 1131–1157.

Haunschild, P. R., & Beckman, C. M. 1998. When do interlocks matter?: Alternate sources of information and interlock influence. ***Administrative Science Quarterly***, 43: 815–844.

Hausman, J. A. 1978. Specification tests in econometrics. ***Econometrica***, 46: 1251–1271.

Haynes, K. T., & Hillman, A. 2010. The effect of board capital and CEO power on strategic change. ***Strategic Management Journal***, 31: 1145–1163.

Hayward, M. L. A., & Hambrick, D. C. 1997. Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. ***Administrative Science Quarterly***, 42: 103–127.

Henderson, A. D., & Fredrickson, J. W. 1996. Information-processing demands as a determinant of CEO compensation. ***Academy of Management Journal***, 39: 575–606.

Higgins, M. C., & Gulati, R. 2006. Stacking the deck: The effects of top management backgrounds on investor decisions. ***Strategic Management Journal***, 27: 1–25.

Hitt, M. A., Ireland, R. D., & Harrison, J. S. 2001. Mergers and acquisitions: A value-creating or value-destroying strategy. In M. A. Hitt, R. E. Freeman, & J. S. Harrison (Eds.), ***The Blackwell handbook of strategic management***: 384–408. Malden, MA: Blackwell.

Holcomb, T. R., Holmes, R. M., & Hitt, M. A. 2006. Diversification to achieve scale and scope: The strategic implications of resource management for value creation. ***Advances in Strategic Management***, 23: 549–587.

Hoskisson, R. E., & Turk, T. A. 1990. Corporate restructuring: Governance and control limits of the internal capital market. ***Academy of Management Review***, 15: 459–477.

Hubbard, T. D., Christensen, D. M., & Graffin, S. D. 2017. Higher highs and lower lows: The role of corporate social responsibility in CEO dismissal. ***Strategic Management Journal***, 38: 2255–2265.

Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. ***Journal of Financial Economics***, 3: 305–360.

Jeong, S.-H., & Harrison, D. 2017. Glass breaking, strategy making, and value creating: Meta-analytic outcomes of females as CEOs and TMT members. ***Academy of Management Journal***, 60: 1219–1252.

Jiang, K., Liu, D., McKay, P. F., Lee, T. W., & Mitchell, T. R. 2012. When and how is job embeddedness predictive of turnover? A meta-analytic investigation. ***Journal of Applied Psychology***, 97: 1077–1096.

Kim, E. H., & Singal, V. 1993. Mergers and market power: Evidence from the airline industry. ***American Economic Review***, 83: 549–569.

Kim, J. Y., Haleblian, J., & Finkelstein, S. 2011. When firms are desperate to grow via acquisition: The effect of growth patterns and acquisition experience on acquisition premiums. ***Administrative Science Quarterly***, 56: 26–60.

King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. 2004. Meta-analyses of post-acquisition performance: Indications of unidentified moderators. ***Strategic Management Journal***, 25: 187–200.

Lange, D., Lee, P. M., & Dai, Y. 2011. Organizational reputation: A review. ***Journal of Management***, 37: 153–184.

Lee, T. W., Mitchell, T. R., Sablynski, C. J., Burton, J. P., & Holtom, B. C. 2004. The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. ***Academy of Management Journal***, 47: 711–722.

Lovelace, J., Bundy, J., Hambrick, D., & Pollock, T. 2018. The shackles of CEO celebrity: Sociocognitive and behavioral role constraints on "star" leaders. ***Academy of Management Review***, 43: 419–444.

Mahoney, J. M., & Mahoney, J. T. 1993. An empirical investigation of the effect of corporate charter antitakeover amendments on stockholder wealth. ***Strategic Management Journal***, 14: 17–31.

Malmendier, U., & Tate, G. 2005. CEO overconfidence and corporate investment. ***Journal of Finance***, 60: 2661–2700.

Malmendier, U., & Tate, G. 2008. Who makes acquisitions? CEO overconfidence and the market's reaction. ***Journal of Financial Economics***, 89: 20–43.

McClelland, P. L., & O'Brien, J. P. 2011. Transaction cost economics and corporate governance: The case of CEO age and financial stake. ***Managerial and Decision Economics***, 32: 141–158.

McGrath, R. G. 2013. ***The end of competitive advantage: How to keep your strategy moving as fast as your business***. Boston, MA: Harvard Business Review Press.

McNamara, G. M., Haleblian, J., & Dykes, B. J. 2008. The performance implications of participating in an acquisition wave: Early mover advantages, bandwagon effects, and the moderating influence of industry characteristics and acquirer tactics. ***Academy of Management Journal***, 51: 113–130.

McWilliams, A., & Siegel, D. 1997. Event studies in management research: Theoretical and empirical issues. ***Academy of Management Journal***, 40: 626–657.

Milgrom, P., & Roberts, J. 1982. Predation, reputation, and entry deterrence. ***Journal of Economic Theory***, 27: 280–312.

Mishina, Y., Dykes, B. J., Block, E. S., & Pollock, T. G. 2010. Why "good" firms do bad things: The effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. ***Academy of Management Journal***, 53: 701–722.

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. 2001. Why people stay: Using job

embeddedness to predict voluntary turnover. ***Academy of Management Journal***, 44: 1102–1121.

Myers, S. C., & Majluf, N. S. 1984. Corporate financing and investment decisions when firms have information that investors do not have. ***Journal of Financial Economics***, 13: 187–221.

Nicklaus, D. 2016, May 15. Pay for performance? Coal CEOs get bonuses as companies lose billions. ***St. Louis Post–Dispatch.*** Retrieved from https://www.stltoday.com/business/columns/david-nicklaus/pay-for-performance-coal-ceos-get-bonuses-as-companies-lose/article_a26af8d5-731b-57f8-9ec8-f9b140174285.html

Nyberg, A. J., Fulmer, I. S., Gerhart, B., & Carpenter, M. A. 2010. Agency theory revisited: CEO return and shareholder interest alignment. ***Academy of Management Journal***, 53: 1029–1049.

Pfarrer, M. D., Pollock, T. G., & Rindova, V. P. 2010. A tale of two assets: The effects of firm reputation and celebrity on earnings surprises and investors' reactions. ***Academy of Management Journal***, 53: 1131–1152.

Puranam, P., & Srikanth, K. 2007. What they know vs. what they do: How acquirers leverage technology acquisitions. ***Strategic Management Journal***, 28: 805–825.

Reuer, J. J., Tong, T. W., & Wu, C. W. 2012. A signaling theory of acquisition premiums: Evidence from IPO targets. ***Academy of Management Journal***, 55: 667–683.

Rhee, M., & Haunschild, P. R. 2006. The liability of good reputation: A study of product recalls in the U.S. automobile industry. ***Organization Science***, 17: 101–117.

Sanders, W. G. 2001. Behavioral responses of CEOs to stock ownership and stock option pay. ***Academy of Management Journal***, 44: 477–492.

Schijven, M., & Hitt, M. A. 2012. The vicarious wisdom of crowds: Toward a behavioral perspective on investor reactions to acquisition announcements. ***Strategic Management Journal***, 33: 1247–1268.

Scholes, M., & Williams, J. 1977. Estimating betas from nonsynchronous data. ***Journal of Financial Economics***, 5: 309–327.

Seo, J., Gamache, D. L., Devers, C. E., & Carpenter, M. A. 2015. The role of CEO relative standing in acquisition behavior and CEO pay. ***Strategic Management Journal***, 36: 1877–1894.

Serfling, M. A. 2014. CEO age and the riskiness of corporate policies. ***Journal of Corporate Finance***, 25: 251–273.

Shani, G., & Westphal, J. D. 2016. Persona non grata? Determinants and consequences of social distancing from journalists who engage in negative coverage of firm leadership. ***Academy of Management Journal***, 59: 302–329.

Shilon, N. 2015. CEO stock ownership policies: Rhetoric and reality. ***Indiana Law Journal***, 90: 353–405.

Smart, C., & Vertinsky, I. 1984. Strategy and the environment: A study of corporate responses to crises. ***Strategic Management Journal***, 5: 199–213.

Spence, M. 1973. Job market signaling. ***Quarterly Journal of Economics***, 87: 355–374.

Stein, E. M., & Stein, J. C. 1991. Stock price distributions with stochastic volatility: An analytic approach. ***Review of Financial Studies***, 4: 727–752.

Steinbach, A. L., Gamache, D. L., & Johnson, R. E. 2018. Don't get it misconstrued: Executive construal level shifts and flexibility in the upper echelons. ***Academy of Management Review***. Published online ahead of print. doi: 10.5465/amr.2017.0273

Steinbach, A. L., Holcomb, T. R., Holmes, M., Devers, C. E., & Cannella, A. A. 2017. Top management team incentive heterogeneity, strategic investment behavior, and performance: A contingency theory of incentive alignment. ***Strategic Management Journal***, 38: 1701–1720.

Tian, J., Haleblian, J., & Rajagopalan, N. 2011. The effects of board human and social capital on investor reactions to new CEO selection. ***Strategic Management Journal***, 32: 731–747.

Uhlenbruck, K., Hitt, M. A., & Semadeni, M. 2006. Market value effects of acquisitions involving internet firms: A resource-based analysis. ***Strategic Management Journal***, 27: 899–913.

Walsh, J. P., & Seward, J. K. 1990. On the efficiency of internal and external corporate control mechanisms. ***Academy of Management Review***, 15: 421–458.

Westphal, J. D., & Deephouse, D. L. 2011. Avoiding bad press: Interpersonal influence in relations between CEOs and journalists and the consequences for press reporting about firms and their leadership. ***Organization Science***, 22: 1061–1086.

Westphal, J. D., & Zajac, E. J. 1998. The symbolic management of stockholders: Corporate governance reforms and shareholder reactions. ***Administrative Science Quarterly***, 43: 127–153.

Westphal, J. D., & Zajac, E. J. 2001. Decoupling policy from practice: The case of stock repurchase programs. ***Administrative Science Quarterly***, 46: 202–228.

Wiseman, R. M. 2010. On the use and misuse of ratios in strategic management research. In D. Bergh & D. J. Ketchen (Eds.), ***Research methodology in strategy and management***, vol. 5: 75–110. Bingley, U.K.: Emerald Group.

Wooldridge, J. M. 2009. ***Introductory econometrics: A modern approach*** (4th ed.). Mason, OH: South-Western Cengage Learning.

Zacher, H., Rosing, K., & Frese, M. 2011. Age and leadership: The moderating role of legacy beliefs. ***Leadership Quarterly***, 22: 43–50.

Zajac, E. J., & Westphal, J. D. 2004. The social construction of market value: Institutionalization and learning perspectives on stock market reactions. ***American Sociological Review***, 69: 433–457.

Zavyalova, A., Pfarrer, M. D., Reger, R. K., & Hubbard, T. D. 2016. Reputation as a benefit and a burden? How stakeholders' organizational identification affects the role of reputation following a negative event. ***Academy of Management Journal***, 59: 253–276.

Zhang, Y., & Wiersema, M. F. 2009. Stock market reaction to CEO certification: The signaling role of CEO background. ***Strategic Management Journal***, 30: 693–710.

Zollo, M., & Meier, D. 2008. What is M&A performance? ***Academy of Management Perspectives***, 22: 55–77.

Zott, C., & Huy, Q. N. 2007. How entrepreneurs use symbolic management to acquire resources. ***Administrative Science Quarterly***, 52: 70–105.

Daniel Gamache (dgamache@uga.edu) is an assistant professor at the University of Georgia's Terry College of Business. He received his PhD in strategic management from Michigan State University. His research takes a behavioral approach to the study of executive decision-making with an emphasis on executive characteristics, compensation, and social evaluations.

Gerry McNamara (mcnamara@bus.msu.edu) is the Eli Broad professor of management at Michigan State University's Broad College of Business. He received his PhD from the University of Minnesota. His research focuses on how the dynamics of markets, competitive pressures, organizational characteristics, executive compensation, and top manager characteristics influence strategic decision-making and communication.

Scott D. Graffin (sgraffin@uga.edu) is the Synovus chair in servant leadership and professor of strategic management at the University of Georgia's Terry College of Business and is also an international research fellow at Oxford University's Centre for Corporate Reputation. He received his PhD in strategic management from the University of Wisconsin, Madison. His research interests include corporate governance, and the impact of reputation, status, and organizational impression management activities on organization outcomes.

Jason T. Kiley (jkiley@okstate.edu) is an assistant professor at the Spears School of Business, Oklahoma State University. He received his PhD in business administration with a focus on strategic management from the University of Georgia. His research interests include organizational impression management, reputation, and social perceptions, often in the context of mergers and acquisitions.

Jerayr (John) Haleblian (john.haleblian@ucr.edu) is a professor at the University of California–Riverside. He received his PhD from the University of Southern California. His research focuses on strategic decisions and their performance outcomes in the contexts of mergers and acquisitions and strategic leadership.

Cynthia E. Devers (cdevers@mays.tamu.edu) is the Lawrence E. Fouraker professor in business and an associate professor of management in the Mays Business School, Texas A&M University; an international research fellow at the Centre for Corporate Reputation, University of Oxford. She earned her PhD in business administration from the Broad College of Business, Michigan State University.