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Shifting perspectives: How scrutiny shapes the relationship between CEO gender and acquisition activity

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Abstract

Research Summary: Several upper echelons studies have found that firms led by female executives are less likely to engage in risky endeavors than those led by male top executives. We argue that conceptualizing female CEOs as universally conservative decisionmakers may paint too simplistic a picture and that the impact of CEO gender on strategic decision-making may vary significantly depending on the given situation CEOs are experiencing. We integrate executive job demands and gender research to propose that scrutiny will exhibit differential effects on female and male CEOs' acquisition activity. We show that in highscrutiny contexts, the difference between male and female CEO acquisition activity disappears. In contrast, in low-scrutiny contexts, the difference between male and female CEOs' acquisition activity is exaggerated.

Managerial Summary: Substantial research has shown that female executives acquire at a lower rate than male executives. We argue that viewing female CEOs as universally conservative decision-makers may paint too simplistic a picture and that the impact of CEO gender on strategic decision-making may vary

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3013

significantly depending on the given situation CEOs are experiencing. In particular, we argue and find that in high-scrutiny contexts, the difference between male and female CEO acquisition activity disappears. This research suggests that managers should consider the impact of environmental context—especially the role of scrutiny—when considering the risk propensity of female leaders.

KEYWORDS

CEO gender, CEO job demands, mergers and acquisitions, strategic leadership, upper echelons theory

Popular press and scholarly articles are replete with the "near universal assumption that women are more risk averse than men" (Kaplan & Walley, 2016, p. 50). Upper echelons research echoes this view, with several studies finding that female top executives are less likely to engage in risky endeavors than male top executives (e.g., Chen et al., 2016; Huang & Kisgen, 2013; Jeong & Harrison, 2017). Although the theoretical mechanisms proposed to motivate such divergent behavior differ, the collective findings suggest that female top executives tend to favor more conservative strategic actions than their male counterparts. However, we argue that conceptualizing female CEOs as universally conservative decision-makers may paint too simplistic a picture. Indeed, although Jeong and Harrison (2017. p. 1236) found metaanalytic evidence suggesting that, on average, female executives engage in less risk than male executives, they concluded that understanding how context moderates the influence of CEO gender on strategic action is the "most important and richest direction for future study." Accordingly, the impact of CEO gender on strategic decision-making may vary significantly depending on the given situation CEOs are experiencing. Thus, it is important that upper echelon scholars develop and test theory that provides a deeper understanding of when CEO gender shapes strategic decision-making.

Acquisition decisions are an important strategic action in which upper echelon scholars have found gender-based differences. Indeed, several studies have demonstrated that firms with women in top leadership roles engage in significantly less acquisition activity than those led solely by men (Chen et al., 2016; Huang & Kisgen, 2013; Levi et al., 2014). Nevertheless, although female CEOs may, on average, make fewer acquisitions than male CEOs, many do acquire, and some make substantial acquisitions. As CEO of Yahoo!, Marissa Mayer acquired 53 companies, spending well over \$2 billion in 4 years. Others have made larger acquisitions, such as Hewlett Packard CEO Carly Fiorina's purchase of Compaq for \$25 billion and IBM's Ginni Rometty's \$34 billion acquisition of Redhat. These examples and the research noted above raise the question of whether important contingencies influence the relationship between CEO gender and acquisitions. In response, we draw on executive job demands (Geletkantycz & Boyd, 2011; Hambrick et al., 2005) and gender research (e.g., Eagly, 1987; Meyers-Levy, 1989) to propose that scrutiny will exhibit differential effects on female and male CEOs' acquisition activity.

Specifically, gender research has shown that women are more deliberative and comprehensive information processers than men (Dulebohn et al., 2016; Meyers-Levy, 1989), which we argue, may help explain why firms led by female executives generally engage in less acquisition activity than those led by men. However, executive job demands theory suggests that high job demands reduce CEOs' ability to comprehensively process information (Hambrick et al., 2005; Reina et al., 2017)—when job demands are low, CEOs have sufficient time and mental resources to make decisions; yet, when they are high, CEOs' time and mental resources are constrained. We theorize that a specific type of job demand—those job demands shaped by high scrutiny—will differentially influence male and female CEO acquisition activity.

Although all CEO jobs are demanding, gender research shows female leaders face substantial gender-based bias and thus harsher evaluations than male CEOs (e.g., Gupta et al., 2018). For example, observers tend to consider women less competent than men in CEO roles and, therefore, evaluate their actions more critically (Gupta, Mortal, Chakrabarty, et al., 2020; Lee & James, 2007; Westphal & Zajac, 2013). Indeed, former Pepsi CEO Indra Nooyi advised, "When you become a CEO and you're a woman, you are looked at differently... You are held to a different standard. There's no question about it" (Kolhatkar, 2018). Women leaders are cognizant of these challenges and thus often expect to face more negative outcomes than men (Gino et al., 2015; Glass & Cook, 2016). Thus, female leaders pay close attention to how others judge them and subsequently tend to feel pressured to invest significant thought, time, and effort into managing others' perceptions (Bell & Sinclair, 2016; Meister et al., 2014; Meister et al., 2017; Swann, Johnson, & Bosson, 2009).

Because women leaders are likely more aware of these judgments and potential negative outcomes when others are closely observing them or their firms (Gino et al., 2015), we expect female CEOs will perceive contexts associated with high scrutiny as *more demanding* than their male counterparts. Building on this, we theorize that high-scrutiny contexts will differentially impact female and male CEO acquisition activity. Specifically, when scrutiny is low, we argue that female CEOs will have the time and mental resources to engage in deliberative due diligence of acquisition deals leading them to uncover more reasons to block acquisitions or move more slowly on them. However, research suggests the stress and demands arising from high-scrutiny contexts will reduce female CEOs' ability to comprehensively process acquisition decisions, leading them to engage in more similar evaluation processes as male CEOs. Our findings demonstrate strong support for our theory by showing that the difference in acquisition activity between male and female CEOs disappears when scrutiny is high but increases when scrutiny is low.

We make several important contributions to upper echelons and acquisitions research. First, by showing that scrutiny conditions the influence of CEO gender on strategic decision-making, our theory and findings demonstrate that focusing solely on gender's main effect provides an incomplete picture of upper echelon decision-making. Thus, our study answers calls for research designed to uncover contextual factors that may moderate the influence of CEO gender on firm risk-taking (e.g., Jeong & Harrison, 2017). Our findings also challenge the prevailing view of a universally conservative female CEO and, thus, hold the potential to expand the conversation regarding gender-based differences in the upper echelon by showing that scholars may be overlooking important nuances in executive action when context is not considered.

Second, our study contributes to research on the antecedents to acquisition activity (see Haleblian et al., 2009). Specifically, because acquisitions often provide negative returns to acquiring firms, researchers remain interested in when and why CEOs may acquire (Devers et al., 2013; Gamache et al., 2019; King et al., 2004). Our findings suggest that, for female CEOs, acquisitions may be a specific response to high-scrutiny contexts. Therefore, we believe our

work has the potential to broaden research on the behavioral motives for acquisitions (Devers et al., 2020).

Third, we contribute to CEO job demands research by focusing on high scrutiny. Although in their initial conceptualization, Hambrick et al. (2005) called for research on how different sources or types of job demands may have different effects, scholars have focused on job demands as one overarching construct. Our focus on scrutiny as a specific category of job demands is an important extension, particularly when it comes to understanding how job demands may differentially impact the actions of male and female CEOs. Thus, our study demonstrates that not all types of job demands are the same and further not all job demands of a given type affect everyone in the same way. Taken together, our paper has important implications for CEO gender, acquisition, executive job demands, and upper echelons research.

1 | THEORY AND HYPOTHESES

Acquisitions are the most common vehicle for firm growth, with more than a trillion dollars of acquisition spending occurring each year in the US alone (Haleblian et al., 2009; Kim et al., 2011). However, such deals often fail to enhance firm value, and thus present downside risk (Devers et al., 2013; Gamache et al., 2019). Recent research suggests that female leaders make more conservative acquisition decisions than male leaders (Chen et al., 2016; Huang & Kisgen, 2013; Jeong & Harrison, 2017). Upper echelon scholars suggest three reasons for this. First, some suggest that due to biological or socialization differences, female executives approach decisions more cautiously than male executives (Gupta, Mortal, Chakrabarty, et al., 2020; Jeong & Harrison, 2017; Kulich et al., 2011). Consistent with this, Jeong and Harrison (2017) demonstrated that, on average, female-led firms invest less in capital expenditures and have lower financial leverage than male-led firms. Similarly, Faccio et al. (2016, p. 193) found that female-led firms "have lower leverage, less volatile earnings, and a higher chance of survival than otherwise similar firms run by male CEOs."

Other scholars have advanced a second argument, proposing that female executives are more cautious decision-makers because they are less overconfident than men (Barber & Odean, 2001; Graham et al., 2013). Bertrand (2011, p. 1550) noted, "While both genders have been shown to display overconfidence, men appear particularly overconfident in their relative ability..." More recently, Huang and Kisgen (2013) argued that results showing that top management teams (TMTs) with either a female CEO or CFO¹ engaged in less acquisition activity than firms with men in those positions were due to gender differences in overconfidence.

Finally, researchers have argued group heterogeneity that arises from the presence of women on a board or a TMT motivates "more thorough intra-board discussions" and leads to greater due diligence and more conservative decisions (Chen et al., 2016; Jeong & Harrison, 2017; Kolev & McNamara, 2020). In support, Jeong and Harrison (2017) found that female TMT membership was negatively associated with strategic risk-taking, and Chen et al. (2016) demonstrated that greater female board representation was associated with less acquisition activity.

These three arguments are disparate; however, other research suggests that gender-based differences in information processing may underlie these effects (Meyers-Levy, 1989; Meyers-Levy &

¹While Huang and Kisgen (2013) group female CEOs and CFOs together in their analysis, most executives were CFOs (approximately 83%), and thus it does not directly test whether female CEOs acquire at a different rate than male CEOs.

Sternthal, 1991). Specifically, information processing scholars have found that "males and females differ in the strategies they use to process information" (Meyers-Levy, 1989, p. 220). The core premise is that "women engage in detailed, elaborate, and effortful analysis of available information, whereas men rely more on single cues that are readily available during information processing and on heuristics" (Dulebohn et al., 2016, p. 153). In this way, when processing information, women consider the interrelationships between different and less accessible cues, whereas men tend to focus on singular and highly salient, self-relevant cues (Dulebohn et al., 2016; Meyers-Levy, 1989; Meyers-Levy & Maheswaran, 1991; Meyers-Levy & Sternthal, 1991; Putrevu, 2001).

Substantial empirical evidence supports this. For example, experimental research shows that, compared to men, women access more informational cues, consider context more keenly, and more thoroughly process information (e.g., Meyers-Levy & Maheswaran, 1991; Meyers-Levy & Sternthal, 1991). Further, functional magnetic resonance imaging (fMRI) neuro-analysis finds that women exhibit higher brain activation patterns than men when making decisions, indicating that they are processing information more comprehensively (Dulebohn et al., 2016). This research indicates that more comprehensive information processing leads women to make different choices than men (Darley & Smith, 1995; Graham et al., 2002).

The factors that CEOs must evaluate when considering an acquisition are seldom clearly outlined (Steinbach et al., 2017). Therefore, effective due diligence of potential acquisition targets requires a comprehensive evaluation of complex, nonroutine issues (Hitt et al., 2006; Steinbach et al., 2019). Gender-based information processing research demonstrates that women are more likely to seek, notice, and consider informational cues than men and process that information more completely (Dulebohn et al., 2016; Meyers-Levy, 1989). Extending this work to the upper echelon and acquisition contexts suggests that, on average, female leaders likely engage in greater due diligence than men when considering acquisitions. This is key as more purposeful target due diligence reduces "biases and decision errors that can motivate managers to view unattractive investments as more valuable and certain than rational evaluations would reveal" (Steinbach et al., 2017, p. 1706). Thus, compared to male peers, female CEOs may be more likely to uncover reasons discouraging them from pursuing acquisitions, and if they decide to acquire, their desire to fully process information will make them more deliberate. Therefore, by integrating information processing and acquisition research (e.g., Chen et al., 2016; Huang & Kisgen, 2013), we expect that, on average, firms led by female CEOs will engage in less acquisition activity than male CEOs. Thus, we propose a baseline hypothesis:

Baseline hypothesis. On average, female CEOs will engage in lower levels of acquisition activity than male CEOs.

Although evidence shows female CEOs tend to engage in less acquisition activity than male CEOs, many female CEOs do acquire, often making very large acquisitions. Therefore, as Jeong and Harrison (2017) argued, undiscovered influences that condition the relationship between CEO gender and strategic decision behavior likely exist. In response, we integrate job demands and gender research to develop a more nuanced understanding of the effect of CEO gender on acquisition behavior. We theorize that scrutiny is a pivotal contextual factor that moderates the relationship between CEO gender and acquisition activity. Thus, high scrutiny contexts—or situations in which others are closely observing CEO and firm actions—likely attenuate the gender-based differences in acquisition activity, while low scrutiny contexts likely enhance those differences.

Executive job demands theory advances critical factors that affect how CEOs process information, making it a natural fit with gender-based information processing research (Geletkantycz & Boyd, 2011; Hambrick et al., 2005). Job demands reflect the "degree to which a given executive experiences his or her job as difficult or demanding" (Hambrick et al., 2005, p. 473). The theory's central premise is that as job demands increase, they create work-related pressures and challenges that constrain CEOs' abilities to process information comprehensively (Hambrick et al., 2005; Reina et al., 2017). More specifically, "executive job demands can boost information processing demands on top executives, forcing them to selectively attend to a narrow range of information and causing them to process information with biases" (Zhu et al., 2022, p. 609). Thus, when job demands are low, CEOs have sufficient time and mental resources to make decisions via a central processing route (Schijven & Hitt, 2012), which involves careful examination of information and "effortful cognitive activity" (Petty et al., 2009, p. 132). In contrast, higher job demands constrain CEOs' time and mental resources, leading them to unintentionally rely on automatic processing (e.g., heuristics or mental shortcuts) rather than comprehensive analysis or search behaviors when making decisions (Krause, 2017; Schijven & Hitt, 2012; Tang et al., 2015; Zhu et al., 2022).

Nevertheless, although all CEOs face job demands, gender research (e.g., Eagly, 1987; Heilman, 2001) provides reasons to believe job demands associated with high levels of scrutiny likely differentially influence male and female CEOs' acquisition activity. Substantial research has shown that women face career bias limiting their opportunities to advance to executive positions (e.g., Daily et al., 1999; Smith et al., 2019). The focus of our study, however, is on the bias women continue to experience once they have advanced to the upper echelons. Indeed, gender scholars have long argued that an incongruity exists between the communal behaviors people expect from women and the agentic behavior they expect from leaders (Eagly & Karau, 2002; Heilman, 2001). The biases that flow from this perceived incongruity increase as women reach higher positions on the corporate ladder (Kulich et al., 2011) and cause evaluators to doubt women's ability to lead, increasing the likelihood that female CEOs are judged ineffective (Gupta et al., 2018; Ryan & Haslam, 2007).

Consistent with this, evidence shows that investors respond more positively to male CEO appointments than female CEO appointments (Lee & James, 2007). Further, female CEOs are more often blamed for poor performance (Park & Westphal, 2013) and treated more negatively by activist investors than male CEOs (Gupta et al., 2018). Evidence also indicates that female executives face larger monetary performance-related penalties than male executives (Albanesi et al., 2015; Faccio et al., 2016; Westphal & Stern, 2007). Finally, female CEOs face higher employment risk, rendering them more susceptible to dismissal (Glass & Cook, 2016; Gupta, Mortal, Silveri, et al., 2020) and, once terminated, are less likely to secure comparable future employment than male CEOs who are terminated for similar reasons (Faccio et al., 2016). As a result, female CEOs are more "vulnerable to scrutiny and performance pressures" (Glass & Cook, 2016, p. 59).

Understandably, therefore, "women perceive even greater personal and professional threats associated with accepting these positions as compared with their male peers" (Klein et al., 2021, p. 570) and view the CEO role as "disproportionately stressful" (Women in the Workplace Study, 2015). In contrast, given the congruence of leadership and the male gender role (Eagly & Karau, 2002), male CEOs are less likely to be judged unsuccessful and given the benefit of the doubt even if they are, as their poor performance is often attributed to outside factors (Klein et al., 2021; Park & Westphal, 2013). Given that female CEOs are aware of these harsher judgments and expect to experience more negative outcomes from them than men (Gino

et al., 2015), they are likely to pay close attention to how others view them (Meister et al., 2017), and thus perceive contexts high in scrutiny as more demanding than their male counterparts. As such, we expect female CEOs will perceive high scrutiny as a more salient, and thus, impactful job demand than male CEOs.

Taken together, three pivotal points emerge from the integration of gender and job demands research: (1) women are more comprehensive information processers than men (e.g., Dulebohn et al., 2016; Meyers-Levy, 1989), (2) job demands reduce the ability of CEOs to process information comprehensively (e.g., Hambrick et al., 2005; Qian et al., 2013), and (3) because women leaders face greater bias and harsher evaluations (e.g., Gupta et al., 2018; Gupta, Mortal, Silveri, et al., 2020), scrutiny associated job demands are more salient and stressful for female CEOs than male CEOs. Extending this work to the acquisition context suggests that when scrutiny is low, the information processing differences between men and women CEOs will increase. As this happens, female CEOs will have the time and mental resources to engage in even more deliberative and comprehensive due diligence regarding deal integration feasibility and valuation (see Steinbach et al., 2019). Thus, under low scrutiny the more comprehensive information processing and evaluation processes are "more likely to unearth compelling reasons to block such proposals" and move more slowly on the acquisitions they do choose to pursue (Chen et al., 2016, p. 306), resulting in fewer overall acquisitions compared to male CEOs. In contrast, the research above also suggests the greater stress female CEOs experience under high scrutiny will likely reduce their ability to comprehensively process information and lead to an unintentional (and unconscious) reliance on mental shortcuts (Hambrick et al., 2005; Reina et al., 2017). As such, when considering deals in high-scrutiny contexts, female and male CEOs will likely engage in more similar evaluation processes and due diligence levels, thereby reducing gender-based differences in acquisition activity.²

In summary, we theorize that higher levels of scrutiny will attenuate the differences between male and female CEOs' acquisition activity. In contrast, when scrutiny is low, female CEOs will engage in more comprehensive information processing, which we argue will motivate greater due diligence and deliberation of acquisition decisions, thereby further reducing their level of acquisition activity relative to male CEOs. Thus, our overarching proposition is:

Proposition. In high-scrutiny contexts, the difference in acquisition activity between male and female CEOs is attenuated, while in low-scrutiny contexts, the difference in acquisition activity between male and female CEOs is magnified.

Next, we draw on these arguments to develop hypotheses to test our proposition in three contexts particularly important for upper echelon decisions: the industry, organizational, and leadership context (e.g., Carpenter et al., 2004; Finkelstein et al., 2009). In these contexts, we examine how scrutiny may moderate the relationship between CEO gender and acquisition activity. For each context, we focus on a situation where we expect high scrutiny on CEOs. As such, we explore the moderating effects of industry dynamism, media coverage, and relative board power.³

²Importantly, we do not suggest that female CEOs will respond more than male CEOs to all job demands. In fact, the tendency of female leaders to process information more thoroughly may protect them from some job demands that might be more impactful on male CEOs.

³We do not claim these are the only sources of scrutiny in these categories but believe these conditions represent situations where scrutiny is particularly high and thus represent a broad test of our proposition.

For each condition, our primary arguments are those described above and presented in our proposition. Due to the biases that female leaders often face, we argue that female CEOs will perceive scrutiny as a more salient and weighty job demand than male CEOs therefore differentially influencing their information processing comprehensiveness. In response, female CEOs likely process information less comprehensively under high scrutiny than under low scrutiny, and we do not expect as strong an effect for men. Thus, we predict that gender-based differences in acquisition activity will decrease under high-scrutiny conditions and increase under low-scrutiny conditions.

1.1 | Industry context—Industry dynamism

Research suggests that industry dynamism is a job demand condition associated with high CEO scrutiny (Gamache et al., 2019). Industry dynamism reflects the level of industry instability (Dess & Beard, 1984; McNamara et al., 2003) and is marked by high turbulence, unpredictable changes (Baum & Wally, 2003; Dess & Beard, 1984; Garg et al., 2003), and heightened pressure and scrutiny from external stakeholders on firm decisions (Gamache et al., 2019; Hambrick et al., 2005). As such, when industry dynamism is high, CEOs face "an ongoing barrage of external jolts that disrupt the status quo" (Henderson et al., 2006, p. 450), making it difficult for CEOs to search for, analyze, and interpret information (Bakker & Shepherd, 2017; Qian et al., 2013). Further, CEOs in highly dynamic environments recognize they are under increased scrutiny from others (Gamache et al., 2019). This results because uncertainty increases information asymmetries between firms and external stakeholders (Gamache et al., 2019). Thus, external stakeholders (such as investors, analysts, competitors, and others) scrutinize the firm when seeking to reduce these asymmetries, thus placing greater attention on CEOs (Connelly et al., 2011; Gamache et al., 2019).

Building our proposition, we argue that increased scrutiny prevalent in dynamic industries will reduce the CEO gender differences in acquisition activity. As argued, high scrutiny creates a more salient and stressful job demand for female CEOs than for male CEOs, who do not experience the same gender biases. Therefore, we believe scrutiny will differentially shape male and female CEO information processing and affect their acquisition activity. We argue that, when under scrutiny, female CEOs experience job demands that reduce their ability to process information comprehensively. Thus, we predict industry dynamism moderates the relationship between CEO gender and acquisition activity, such that we expect greater gender differences in acquisitions when dynamism is low but reduced gender differences when dynamism is high. We thus hypothesize:

Hypothesis 1. Industry dynamism will moderate the relationship between CEO gender and acquisition activity, such that when industry dynamism is high the negative relationship between female CEOs and acquisition activity is weaker, but when industry dynamism is low the relationship is stronger.

1.2 | Organizational context—Media coverage

CEOs also face pronounced scrutiny when their firms are in the media spotlight (Perryman et al., 2010). Although media coverage represents scrutiny from others outside of the firm, it is

3019

WILEY

a firm-specific source of scrutiny that serves as a barometer of the public attention individual firms receive (Pfarrer et al., 2010). As Bednar et al. (2013, p. 913) noted, "media coverage can shine a light on firm actions that would otherwise be undetected or less salient to firm constituents." Thus, high media coverage draws greater scrutiny from analysts, institutional investors, and other stakeholders (Gamache & McNamara, 2019; Perryman et al., 2010). Media coverage also amplifies the degree to which people view CEOs as the source of company success or failure (Quigley et al., 2017). Indeed, because high levels of media coverage raise CEOs' profiles and increase stakeholders' expectations, they will exhibit strong leadership and grow the firm (Graffin et al., 2008; Meznar & Nigh, 1995), greater media coverage creates higher CEO scrutiny.

Building on this, we argue that the scrutiny created by high media coverage will reduce the gender difference in CEO acquisition activity. Specifically, the increased pressure of the media spotlight can limit CEOs' ability to consider all available information, which constrains information processing and motivates automated processing shortcuts (Hambrick et al., 2005). As argued earlier, scrutiny is more salient for female CEOs than male CEOs and thus will constrain the information processing of female CEOs more than male CEOs, moderating the relationship between CEO gender and acquisition activity. We expect gender differences in acquisition activity to be attenuated when media coverage is high but exaggerated when media coverage is low. We thus hypothesize:

Hypothesis 2. Media coverage will moderate the relationship between CEO gender and acquisition activity, such that when media coverage is high the negative relationship between female CEOs and acquisition activity is weaker, but when media coverage is low the relationship is stronger.

1.3 | Leadership context—Relative board power

CEOs can vary substantially in the degree to which they face scrutiny from the board of directors (Busenbark et al., 2016; Haynes & Hillman, 2010). Powerful boards hold more control over the CEO in shaping firm-level decisions than do less powerful boards (Chin et al., 2013; Neville et al., 2019). Research has shown that powerful boards can influence the appointment of new directors (Westphal & Zajac, 1995), selection of CEO successors (Zajac & Westphal, 1996), and the level and direction of strategic change (Golden & Zajac, 2001; Haynes & Hillman, 2010). Because high-power boards often intensely monitor CEOs, those with lower relative power are more frequently disciplined than those with higher relative power (Finkelstein et al., 2009). As such, Hambrick et al. (2005) suggest that CEOs with low power relative to their boards face additional job demands that may lead them to rely more on decision-making shortcuts than high-power CEOs.

When boards have high power relative to the CEO, we expect gender-based differences in acquisition activity to decrease, as the heightened scrutiny created by high board power reduces the ability of CEOs to comprehensively process information, forcing them to rely on cognitive shortcuts (Hambrick et al., 2005). As argued in our proposition, scrutiny is likely more salient and stressful to female CEOs than male CEOs. Thus, we predict scrutiny from the board has a larger influence on the information processing of female CEOs than male CEOs, such that when board power is high, the difference in acquisition activity between male and female CEOs will decrease, however, when board power is low, the difference will increase. As such, we hypothesize:

Hypothesis 3. Relative board power will moderate the relationship between CEO gender and acquisition activity, such that when relative board power is high the negative relationship between female CEOs and acquisition activity is weaker, but when relative board power is low, the relationship is stronger.

2 | METHODS

We utilized the *SDC Mergers & Acquisitions Database* for acquisition data, *Institutional Share-holder Services (ISS; formerly Risk Metrics)* for director data and *Execucomp* for CEO data. Media coverage data came from *Ravenpack News Analytics* and firm data from *Compustat*, with dynamism, munificence, and diversification from the *Compustat Segments* database. Our panel contains all firms in Execucomp from 2006 to 2013. After missing data, our final sample is 10,351 observations from 1700 firms.

2.1 | Dependent variable

2.1.1 | Acquisition activity

We captured two distinct measures of firm acquisition strategies: *number of acquisitions* and *acquisition spending* (e.g., Gamache et al., 2015). *Number of acquisitions* is the annual total number of majority acquisitions announced and completed for deals over \$10 million (Steinbach et al., 2017). *Acquisition spending* is the total annual dollar value (log-transformed) of spending for every majority acquisition announced and completed for deals over \$10 million. The SDC database, however, does not report a value for every acquisition. We thus conducted a within-firm-year mean replace for acquisition value when it was missing (Gamache et al., 2015). In firm-years where the firm conducted one or more acquisitions, but where no acquisition value was reported, within firm-year mean replacement was not possible, so we treated the acquisition value as missing, leaving a total of 8923 observations for predicting acquisition spending.

2.2 | Independent and moderator variable

2.2.1 | Female CEO

CEO gender is a dummy variable of 1 if the CEO was female and 0 if male.

2.2.2 | Industry dynamism

We regressed industry sales (two-digit SIC code) on a year-count variable over a 5-year window. Industry dynamism was captured by taking the standard error of that regression coefficient and dividing it by the mean industry sales (Dess & Beard, 1984).

3021

WILEY

2.2.3 | Media coverage

We measured media coverage as the number of articles published about the firm each year (Fiss & Zajac, 2006; Pfarrer et al., 2010). *Ravenpack News Analytics* captures all news reports from Barron's, The Wall Street Journal, and Dow Jones Newswires, tagging each to the firms featured (Connelly et al., 2017; Drake et al., 2016). Ravenpack assigns a "relevance" score from 0 and 100 to each article that reflects how central the company is in the article, with a 0 reflecting a passive mention and 100 meaning the company was the focus of the article. We included articles with a relevance score of 90 or higher—the threshold for highly relevant articles (Smales, 2014).

2.2.4 | Relative board power

Following prior research, we operationalized relative board power using three indicators that capture the relative power of the board compared to the CEO: (1) CEO duality, (2) the ratio of CEO ownership to board ownership (number of shares owned by the CEO from Execucomp/ sum of shares owned by all directors from ISS; Haynes & Hillman, 2010), and (3) the ratio of the number of directors appointed after the CEO began their term to the total number of board members (Westphal & Zajac, 1995). We standardized and summed each indicator. We reverse-coded this value so that higher values represent more relative board power.

2.3 | Control variables

We controlled for factors that may influence acquisition activity. At the firm level, we controlled for *firm size* (using the natural log of firm assets), *firm performance* (using net income), and *leverage*, because a firm's size and financial position could influence their ability to acquire (Haleblian et al., 2009). Firms may also develop routines based on prior acquisitions so we controlled for *acquisition history* using the number (or value) of acquisitions undertaken by the firm in the past 3 years (Reuer et al., 2012). We controlled for *diversification* strategy by using an entropy measure (Wiersema & Bowen, 2008).⁴ Additionally, because a media coverage may be influenced by either positive or negative events, we controlled for the firm's *average event sentiment*. Ravenpack records a sentiment score for each event or action in the news reports based on the type of event the firm engages in. Each event type is given a score based on financial experts categorizing that type of event as generally having a positive or negative financial or economic impact. A score of 0 represents very negative events, 100 represents very positive events, and 50 represents neutral events. For each firm-year in our data, we calculated the average annual sentiment of the events engaged in by the firm (Lin et al., 2014).

At the industry level, we controlled for *industry munificence* measured using the 5-year regression described above for capturing industry dynamism—the regression coefficient was divided by the industry mean sales and reflects the growth or decline of the industry (Seo et al., 2015). We also controlled for *industry average acquisition activity* measured as the industry

⁴The Segments database has more limited coverage than the Compustat primary database, so we used mean replacement when diversification was missing. Results when this control is not included are consistent with those presented.

average of the respective dependent variable, excluding the focal firm. Further, because board composition may influence acquisitions, we controlled for several board characteristics. We controlled for the *percentage of female external directors* to ensure we captured the effect of female CEOs beyond any effect of women on the board. We also controlled for additional ways in which diversity may shape the board by including *board age diversity* using the coefficient of variation and *board ethnic diversity* using the Blau Index (Chen et al., 2016).⁵ Additionally, to account for any influence of other female TMT members, we controlled for the *percent of female TMT members* (excluding the CEO; Chen et al., 2016).

We also controlled for several CEO-level factors. Because younger executives may have an incentive to engage in more acquisitions (Yim, 2013), we controlled for *CEO age*. To account for the influence of CEO compensation, we controlled for *CEO total compensation* (TDC1) and *stock options held* measured as the value of all in-the-money unexercised stock options held by the CEO (Devers et al., 2007). Finally, we included *year dummy variables* to capture any other time-specific effects.⁶

2.4 | Analysis

First, we lagged all predictor variables (except for the industry average acquisition activity) 1 year before the dependent variable. We standardized all nondichotomous predictor variables before creating the interaction terms. For predicting *number of acquisitions*, we used random-effects negative binomial regression (Li et al., 2013). When predicting *acquisition spending*, we used random-effects Tobit regression, because it is a continuous non-negative number that is "cornered" or censored at a particular value—in this case, 0 (Wooldridge, 2009). We used random-effects analysis with standard errors clustered by firms in both cases because fixed-effects analysis is not appropriate when studying time-invariant variables, such as CEO gender (Chin et al., 2013).

3 | RESULTS

Table 1 presents summary statistics and inter-correlations. Table 2 presents regression results for both measures of acquisition activity. Models 1–3 include negative binomial regression predicting *number of acquisitions*. Models 4–6 include Tobit regression predicting *acquisition spending*. Models 1 and 4 include only control variables. The coefficient for the *percentage of female external directors* was negative when predicting both number of acquisitions ($\beta = -0.061$, p = .008) and acquisition spending ($\beta = -0.334$, p = .010). This serves as a replication of Chen et al.' (2016) work and provides further evidence that female board representation reduces acquisition activity.

Models 2 and 5 include the main effect of *female CEO*, while Models 3 and 6 present the tests of our hypotheses. Our baseline hypothesis predicted that, on average, female CEOs

3023

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⁵At times, ISS has a year of missing data for a firm otherwise in their data. Because of the relative stability of boards, we used a within-firm mean replace for these variables. Results without these controls are consistent with those presented. ⁶Our theory focused on between industry differences, and as such we do not include industry dummy variables in our primary models (see Certo et al., 2017). In supplemental analysis, we included 1 digit SIC dummy variables (Malmendier et al., 2016). Our results with these dummy variables are consistent with those presented.

engage in lower levels of acquisition activity than male CEOs. In support of this hypothesis, the coefficient for female CEOs was negative for both *number of acquisitions* ($\beta = -0.552$, p = .000) and *acquisition spending* ($\beta = -2.995$, p = .000). These results suggest that, in our sample, firms led by female CEOs engaged in less acquisition activity than firms led by male CEOs. Practically speaking, the average female CEO in our sample made 41.88% fewer acquisitions than male CEOs and spent 44.58% less in total acquisition spending. Of note, we find this effect even with controlling for the percentage of female external directors. This indicates that the impact of female CEOs is beyond the impact of females on the board and adds credence to Jeong and Harrison's (2017) assertion that female CEOs are theoretically and empirically distinct from female board representation.

Hypothesis 1 predicted that industry dynamism would moderate the relationship between CEO gender and acquisition activity such that the negative relationship between female CEOs and acquisition activity is weaker when dynamism is high and stronger when dynamism is low. As shown in Table 2, the coefficient for the industry dynamism X female CEO interaction was positive when predicting both number of acquisitions ($\beta = 0.357$, p = .004) and acquisition spending ($\beta = 1.387$, p = .046), thus supporting our hypothesis. Figure 1 provides visual evidence demonstrating that the relationship between female CEO and acquisition activity is stronger when industry dynamism is low and weaker when industry dynamism is high.⁷ We recognize, however, that coefficients alone may not tell the full story of the nature of the interaction, particularly because we have nonlinear dependent variables (Nadkarni & Chen, 2014; Wiersema & Bowen, 2009). As such, we also conducted a marginal effects analysis (also known as an "extended simple slopes analysis"; Busenbark et al., 2021, p. 5), and we report the results in Table 3. These analyses show the influence of our independent variable (female CEO) on our dependent variables at varying levels of the moderator variables (Busenbark et al., 2021). The margins analysis for industry dynamism provides additional support for our hypothesis. For both dependent variables, the marginal effect of having a female CEO (compared to having a male CEO) is negative for low and moderate levels of industry dynamism. However, at high levels of industry dynamism, the marginal effect of female CEO on acquisition activity does not appear to be as substantial, thus demonstrating that male and female CEOs acquire at similar levels when industry dynamism is high. Finally, our findings also indicate a strong practical difference in female CEOs' acquisition activity across levels of dynamism. Female CEOs made 78.57% more acquisitions (and 36.84% more total acquisition spending) in highly dynamic environments (+1 SD) than they did in low dynamism environments (-1 SD).

Hypothesis 2 predicted that media coverage would moderate the relationship between CEO gender and acquisition activity such that the negative relationship between female CEOs and acquisition activity is weaker when media coverage is high, but stronger when media coverage is low. In support, the coefficients for the interaction between *media coverage* and *female CEO* were positive when predicting both *number of acquisitions* ($\beta = 0.311$, p = .022) and *acquisition spending* ($\beta = 2.250$, p = .046). As shown in Figure 2, the negative relationship between female CEOs and acquisition activity disappears at high levels of media coverage. Further, as shown in Table 3, the marginal effect of having a female CEO is negative for low and moderate levels of media coverage but are not related at high levels of media coverage. This is consistent with Hypothesis 2 and suggests female CEOs increase their acquisition activity when media coverage is high but further decrease their acquisition activity when media coverage is low. Practically speaking, in our sample, female CEOs made 96.22% more acquisitions (and had 127.78% higher

⁷Interaction plots use the dependent variable *acquisition spending*. Plots for *number of acquisitions* are very similar.

Variahlee	Mean		1	, ,	~	4	u	'e	r	o	•	-	1		-	1	4	91	17	18	10	00	7	٤	33
1 Mumber of acquisitions	0.873	CTO C	100	2																					
	C/0.0	7/0.7	N.1	3																					
2 Acquisition spending(ln, \$)	1.488	2.682	0	75 1.(000																				
3 Female CEO	0.033	0.180	;0 . – (30 –.(136 1.	000																			
4 Industry dynamism	0.026	0.020	;0;- (31 –.0	ı.— 91(003 1	000.																		
5 Media coverage	337.374	666.703	.25	91 .2	1 222	007	.085 j	000																	
6 Relative board power	-0.033	1.661	д 0. – .	42 –.C	. 720	029 –	- 010	020	000.1																
7 Firm size	21.678	1.716	32:	59 .2	268 –.1	600	060.	.438 -	094]	1.000															
8 Firm performance	469.357	2275.479	26	58 .2	205	003 -	.007	.351 -	056	.358	1.000														
9 Leverage	2.294	20.455	10. 2	10 .C	· 800	005	.006	.015	.003	.063	.008	000.1													
10 Acquisition history #	1469.810	9340.058	3 .6 <u>2</u>	29 .3	340 –.	034 -	.024	.413 -	041	.358	.288	.017 1	000.												
11 Acquisition history \$	2.778	5.769	25	85 .1	.– 761	- 600	.001	- 389 -	036	.301	.360	.012	.475 1	000											
12 Diversification	0.451	0.565	; .1 ⁴	40 .1	126 –.1	- 007	.002	- 072 -	023	.210	.139	.017	.168	091 1	000.										
13 Average event sentiment	52.588	3.624	30. 1	54 .C	· 88(020 -	.109	- 002 -	025	.016	.060	.007	.030	.030	.063 1	.000									
14 Industry munificence	0.039	0.075	<u>.05</u>	29 .C	· 740	020 -	.400	- 017	003	.073	.039	019	.048	.045 –	.028	.134 1	000								
<pre>15 Industry average acquisition activity #</pre>	0.028	0.871	L .2	35 .1	162	- 000	.077	- 800.	- 600	075	- 024 -	002	.157	.055	.014	.069	.103 1	000							
16 Industry average acquisition activity \$	4.201	2.452	.1. 2	18	- 159	- 002	.158	- 600.	014	.007	.030	.005	.059	.052	.024	.094	.273	.422 1.	000						
17 % of Female external directors	13.492	11.897	.0.	76 .(050	.017	.123 -	010	.278	.105	.025	.107	.101	.073 –	- 044 -	.043 –	.034 –.	060 1.(000					
18 Board age diversity	0.125	0.040	;0 . – (37 –.(· 84(033 –	.026 -	082	- 980.	223 -	087 -	- 900:-	.049 –	- 044 –	.104 –	.019 -	.020	.042	036 – J	132 1.0	00				
19 Board ethnic diversity	0.488	0.371	i – .0	30 –.(124	026 –	- 170.	- 078 -	- 800	142 -	071	.004 –	.063 –	.050 –	- 650.	.033	.096	.063	с — 190	103 .0.	55 1.00	00			
20 % of Female TMT members	0.068	0.119	<u>;</u> 0.– (31 –.(. 332	- 093	.027	.029	- 003 -	027	.003	- 120.	-044	.015 –	- 190.	.015 –	- 019 -	.006 –	053 .]	134 –.0	24 .00	04 1.00	0		
21 CEO age	55.670	7.359) –.0().– 60	.– 720	049	- 010	- 2005 -	299	.113	- 036 -	-000	.003	.018	.077	.033 –	.003 -	.052 –).– (10	1212	53 .00	00. IC	3 1.000	0	
22 Total compensation (\$M)	5.420	6.560	2(ζ. IC	2204	005	.042	- 311 -	117	.503	.291	.011	.256	.236	.115	.040 –	.012 -	.027	. 800	141 – 0	30 86	36 .03	:00 :06	2 1.00	0
23 Options held (\$M)	9.710	33.800	.1(1. 40	L17 –.	023 -	.015	.132 -	112	.167	.123 -	008	.122	.107	600.	.046	.007	015	036 .()28 –.0	10 60	10 .00	6 .02	0 .29	0 1.000
Note: $n = 10,351$ except for varialess than 021 are significant a	t p < .05.	, and 16,	wher	te n =	8923.	Corre	lation	greate	er than	.0195	or less	than –	.0195 a	re sign	ificant	at <i>p</i> <	.05. Fo	r variał	iles 2, 1	1, and 1	.6, corre	elation	s great	er tha	n .021 oi

TABLE 2 Effect of CEO gender on acquisition activity.

	Number	of acquisit	ions	Acquisition spending				
Variables	(1)	(2)	(3)	(4)	(5)	(6)		
Hypothesized effects								
Female CEO		-0.328	-0.552		-1.891	-2.995		
		(.020)	(.000)		(.008)	(.000)		
Female CEO × dynamism			0.357			1.387		
			(.004)			(.046)		
Female CEO × media coverage			0.311			2.250		
			(.022)			(.046)		
Female CEO \times relative board power			0.439			2.623		
			(.004)			(.002)		
Control variables								
Industry dynamism	-0.060	-0.061	-0.067	-0.278	-0.279	-0.319		
	(.007)	(.006)	(.003)	(.029)	(.028)	(.013)		
Media coverage	0.025	0.026	0.026	0.464	0.462	0.459		
	(.202)	(.198)	(.195)	(.000)	(.000)	(.000)		
Relative board power	-0.022	-0.020	-0.029	0.035	0.044	-0.017		
	(.317)	(.349)	(.172)	(.779)	(.719)	(.888)		
Firm size	0.253	0.252	0.250	1.438	1.437	1.425		
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)		
Firm performance	0.014	0.014	0.015	0.109	0.113	0.101		
	(.413)	(.416)	(.382)	(.274)	(.257)	(.310)		
Leverage	0.052	0.051	0.056	0.023	0.012	0.087		
	(.651)	(.660)	(.626)	(.976)	(.988)	(.910)		
Acquisition history \$				0.057	0.057	0.057		
				(.508)	(.501)	(.504)		
Acquisition history #	0.056	0.056	0.057					
	(.000)	(.000)	(.000)					
Diversification	0.120	0.120	0.120	0.674	0.673	0.666		
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)		
Industry munificence	-0.003	-0.003	-0.005	0.013	0.008	-0.005		
	(.891)	(.878)	(.802)	(.924)	(.954)	(.968)		
Industry average acquisition activity	0.158	0.158	0.158	1.149	1.160	1.160		
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)		
Average event sentiment	0.101	0.100	0.101	0.583	0.581	0.580		
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)		
% of Female external directors	-0.061	-0.059	-0.057	-0.334	-0.324	-0.314		
	(.008)	(.010)	(.013)	(.010)	(.012)	(.015)		

SMS Strategic Management Journal



3027

TABLE 2 (Continued)

	Number o	of acquisitio	ons	Acquisitio	on spending	g
Variables	(1)	(2)	(3)	(4)	(5)	(6)
Board age diversity	-0.070	-0.072	-0.072	-0.072	-0.089	-0.086
	(.003)	(.002)	(.002)	(.578)	(.490)	(.504)
Board ethnic diversity	-0.020	-0.019	-0.017	-0.083	-0.072	-0.065
	(.341)	(.380)	(.412)	(.503)	(.560)	(.599)
% of Female TMT members	-0.010	-0.011	-0.008	-0.142	-0.133	-0.129
	(.622)	(.573)	(.684)	(.222)	(.250)	(.265)
CEO age	-0.081	-0.084	-0.087	-0.616	-0.633	-0.651
	(.001)	(.000)	(.000)	(.000)	(.000)	(.000)
CEO total compensation	0.052	0.051	0.051	0.397	0.395	0.396
	(.000)	(.001)	(.001)	(.001)	(.001)	(.001)
Options held	0.030	0.030	0.030	0.195	0.194	0.191
	(.002)	(.002)	(.002)	(.021)	(.022)	(.024)
Constant	0.587	0.583	0.586	-4.203	-4.161	-4.144
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)

Note: n = 10,351 for number of acquisitions; n = 8923 for acquisition spending. Two-tailed *p* values are report in parentheses. Year dummy variables are included but not reported.



FIGURE 1 Industry dynamism by CEO gender interaction.

acquisition spending) when they had high media coverage (+1 SD) compared to when they had low media coverage (-1 SD).

Finally, Hypothesis 3 predicted that relative board power would moderate the relationship between CEO gender and acquisition activity such that the negative relationship between female CEOs and acquisition activity is weaker when relative board power is high and stronger

GAMACHE ET AL.

TABLE 3 Marginal effects analysis.

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Value of moderator variable	The marginal effe female CEO on nu acquisitions	ct of having a umber of	The marginal effe female CEO on ac spending	ect of having a equisition
varue of moderator variable	dy/dx	P value	dy/dx	P value
Industry dynamism				
1st Percentile	-0.943243	.000	-4.501832	.000
5th Percentile	-0.923851	.000	-4.426440	.000
25th Percentile	-0.760540	.000	-3.791537	.000
Median	-0.608877	.000	-3.201920	.000
75th Percentile	-0.460752	.002	-2.626054	.001
95th Percentile	0.232307	.413	0.111446	.946
99th Percentile	0.946270	.061	2.912716	.325
Media coverage				
1st Percentile	-0.684975	.000	-3.937799	.000
5th Percentile	-0.669461	.000	-3.825650	.000
25th Percentile	-0.641341	.000	-3.625885	.000
Median	-0.609343	.000	-3.394578	.000
75th Percentile	-0.544378	.000	-2.938973	.000
95th Percentile	-0.284031	.077	-1.144592	.291
99th Percentile	0.617731	.198	5.100696	.198
Board power				
1st Percentile	-1.345744	.000	-7.744307	.000
5th Percentile	-1.220050	.000	-6.993580	.000
25th Percentile	-0.885488	.000	-4.908675	.000
Median	-0.543697	.000	-2.938701	.000
75th Percentile	-0.152676	.341	-0.620253	.452
95th Percentile	0.067908	.739	0.696841	.521
99th Percentile	0.067915	.739	0.696883	.521

when relative board power is low. For both *number of acquisitions* ($\beta = 0.439$, p = .004) and *acquisition spending* ($\beta = 2.623$, p = .002), the coefficient for the *female CEO* × *relative board power* interaction was positive, providing support for our hypothesis. Figure 3 demonstrates that the negative relationship between female CEO and acquisition activity is weaker for boards with high relative power. As shown in Table 3, margins analysis indicates that the marginal effect of having a female CEO is negative for low levels of relative board power, but not at high levels of relative board power. Thus, consistent with Hypothesis 3, our results suggest that when relative board power is high, the acquisition activity between male and female CEOs is not statistically different. On a practical level, our results show that female CEOs made 127.01% more acquisitions (and had 119.45% higher acquisition spending) under high relative board power



SMS Strategic Management Journal



FIGURE 2 Media coverage by CEO gender interaction.



FIGURE 3 Relative board power by CEO gender interaction.

(+1 SD) compared to low relative board power (-1 SD). Below, we discuss a number of supplemental analyses to further evaluate the robustness of our findings.

Supplemental analyses and robustness tests 3.1 I

Assessing the potential for endogeneity 3.1.1 I

Several pieces of evidence suggest that endogeneity does not drive our findings. First, recent research has demonstrated that interaction terms are unlikely to suffer bias due to endogeneity (Bun & Harrison, 2019; Busenbark et al., 2022). Because our focal hypotheses are all based on

3029

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interaction terms, we can be confident that endogeneity does not create bias. Indeed, these authors noted, "in interaction models the researcher can always perform valid statistical inference for the interaction term without the use of standard [instrumental variable] exclusion restrictions" (Bun & Harrison, 2019, p. 824). However, because we are interested in both the interaction terms and the main effect of CEO gender (our baseline hypothesis), we conducted additional analyses.

Our second point of evidence comes from the Impact Threshold of a Confounding Variable (ITCV) test (Busenbark et al., 2022; Frank et al., 2013). The ITCV provides an empirical measure to test the potential influence of omitted variable bias. In analyses using a binary independent variable (such as female CEO in our study), the ITCV (using the Robustness of Inference to Replacement approach) shows the proportion of statistically significant treated observations that would need to be replaced by a null effect in the presence of an omitted variable for the overall relationship to be biased (e.g., Busenbark et al., 2017; Oliver et al., 2018). The ITCV test results are compelling; when predicting both the number of acquisitions and acquisition spending, the ITCV demonstrated that at least 54% of the significant cases would need to be overturned to invalidate our findings ($\alpha = 0.10$).

Third, to provide additional evidence as to whether endogeneity was a concern in our study, we conducted a treatment effect regression analysis. A treatment effects model is the preferred two-stage model for when an independent variable is binary such as female CEO (e.g., Busenbark et al., 2017; Oliver et al., 2018). A treatment effects model is similar to other two-stage models (e.g., 2SLS); however, it predicts a binary variable in the first stage (Oliver et al., 2018). To conduct this analysis, we used a theoretically derived instrument (also called exclusion restriction)-industry female TMT representation, which we operationalized as the total number of females in the TMT in other firms from the same industry as the focal firm (four-digit SIC). Theoretically, the number of female executives at other firms in the industry should be associated with the likelihood of the focal firm's CEO being female, because women tend to concentrate in some industries more than others (Klein et al., 2021). At the same time, however, the number of female executives at other firms is unlikely to be linked to the focal firm's acquisition activity because, theoretically, it should have no direct impact on the focal firm's strategic decisions. The results of the treatment effects models for both dependent variables were consistent with the results reported above for the main effect of CEO gender on acquisition activity and all our hypothesized interaction variables. We also ran treatment effects models using a natural (aka mathematical; Busenbark et al., 2017; Kennedy, 2008) instrument-total shareholder returns (1 year). Again, the results are consistent with those provided in our primary analysis. Finally, we ran a model that included both our theoretical instrument (industry female TMT representation) and our natural instrument (total shareholder returns) and, again, found results consistent with our primary analysis.⁸ In summary, the fact that interaction terms are not likely to suffer bias due to endogeneity (Bun & Harrison, 2019), combined with the ITCV and treatment effects analysis, provides strong evidence that our findings are not biased due to endogeneity.

⁸The Sargan test on our instruments was not significant for either DV ($\chi^2 = .001$, p = .967 for *number of acquisitions*; $\chi^2 = .035$, p = .8520 for *acquisition spending*), providing evidence that our instruments are likely exogenous (Kennedy, 2008).

3.1.2 | Exploring the role of firm performance

In our primary analysis, we explored three potential sources of scrutiny; however, another potential source of scrutiny that CEOs may experience stems from firm performance. Specifically, stakeholders "expect the firm to perform at least on par with other firms in the reference group" (Kim et al., 2015, p. 1365). Thus, performance relative to social referents is often an important reference point for shaping CEO behavior (Deb et al., 2019) and is more accurate than historical performance, as it reflects current business conditions (Lee et al., 2023).⁹ It is thus possible that performance relative to social aspirations may shape stakeholder scrutiny of CEOs. On the one hand, when firms perform below industry competitors, investors and other stakeholders scrutinize CEO actions to determine whether they will improve firm performance (Deb et al., 2019). On the other hand, when firms perform above competitors in their industry, stakeholders tend to hold optimistic expectations for future performance and, thus, hold them to even higher standards (Mishina et al., 2010; Xu et al., 2019). Therefore, firms with performance significantly above or below their peer firms may experience high scrutiny.

We thus conducted supplemental analyses to examine whether the relationship between CEO gender and acquisition activity is moderated by performance above or below social referents. We followed the behavioral theory of the firm research and measured performance relative to social referents using a spline function (e.g., Kim et al., 2015; Mishina et al., 2010). To do so, we measured referent performance level (ROA) based on the average performance of all firms in the firm's two-digit industry (e.g., Harris & Bromiley, 2007; Xu et al., 2019).

The results are presented in Table 4. For both dependent variables, we find an interaction between performance above social referents and female CEO (number of acquisitions: $\beta = 1.636$, p = .014; acquisition spending: $\beta = 9.996$, p = .010). Consistent with our other finding, examining the margins for this analysis demonstrated that when performance above social aspirations is high, the relationship between female CEO and acquisition activity disappears. In contrast, we do not find an interaction between performance below social referents and female CEO (number of acquisitions: p = .144; acquisition spending: p = .722). Although the lack of a relationship between performance below social references and female CEOs may seem surprising initially, we believe that it reflects a larger reality facing poor-performing firms for several reasons. First, poor-performing firms may lack the financial resources available to engage in acquisitions, thus limiting the ability of CEOs to acquire even if they are otherwise inclined to do so (Kuusela, Keil, & Maula, 2017). Indeed, firms require "both a motive and the requisite resources to engage in acquisition activity" (Iyer & Miller, 2008, p. 811). Second, research building on the threat rigidity hypothesis suggests that when performance is particularly low, CEOs may shift their attention to survival and neglect opportunities to grow the firm (Iyer & Miller, 2008). Finally, acquisitions are a two-sided decision, and targets need to be motivated to sell to a particular acquirer (Devers et al., 2020). Targets may be less willing to be acquired by poor-performing firms, fearing their long-term security in the combined company.

In summary, these supplemental analyses are consistent with the premise that CEOs performing above their social referents face increased scrutiny and provide further support for our

⁹Of course, performance above or below historical referents may also place pressure on the CEO, but this would be selfimposed pressure, rather than scrutiny which, as we have noted, comes from others. Historical performance primarily influences "the way managers evaluate performance" relative to their aspirations (see Kim et al., 2015, p. 1364), and thus reflects their internal perspective.

TABLE 4 Exploring the role of firm performance.

	Numbe	r of acqui	sitions	Acquisi	tion spen	ding
Variables	(1)	(2)	(3)	(4)	(5)	(6)
Hypothesized effects						
Female CEO		-0.329	-0.331		-1.868	-1.699
		(.038)	(.022)		(.016)	(.016)
Female CEO × performance above social			1.636			9.996
referents			(.014)			(.010)
Female CEO × performance below social			-0.726			0.714
referents			(.288)			(.722)
Control variables						
Performance above social referents	-0.031	-0.031	-0.031	0.135	0.131	0.113
	(.146)	(.144)	(.141)	(.473)	(.487)	(.547)
Performance below social referents	-0.021	-0.021	-0.019	-0.810	-0.807	-0.807
	(.367)	(.372)	(.394)	(.002)	(.002)	(.003)
Industry dynamism	-0.061	-0.062	-0.062	-0.276	-0.277	-0.277
	(.007)	(.006)	(.006)	(.030)	(.029)	(.029)
Media coverage	0.024	0.024	0.025	0.475	0.472	0.472
	(.238)	(.234)	(.214)	(.000)	(.000)	(.000)
Relative board power	-0.021	-0.020	-0.021	0.037	0.047	0.043
	(.329)	(.362)	(.339)	(.764)	(.705)	(.728)
Firm size	0.252	0.251	0.252	1.412	1.412	1.414
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Firm performance	0.015	0.015	0.016	0.109	0.113	0.110
	(.402)	(.405)	(.374)	(.277)	(.260)	(.272)
Leverage	0.052	0.051	0.061	0.034	0.022	0.135
	(.655)	(.663)	(0.590)	(.965)	(.977)	(.861)
Acquisition history \$				0.056	0.057	0.060
				(.517)	(.509)	(.487)
Acquisition history #	0.056	0.057	0.057			
	(.000)	(.000)	(0.000)			
Diversification	0.121	0.121	0.121	0.677	0.675	0.675
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Industry munificence	-0.004	-0.005	-0.005	0.015	0.009	0.009
	(.848)	(.835)	(824)	(.913)	(.944)	(.948)
Industry average acquisition activity	0.159	0.159	0.159	1.165	1.175	1.176
	(.000)	(.000)	(0.000)	(.000)	(.000)	(.000)
Average event sentiment	0.100	0.100	0.099	0.557	0.556	0.555
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)

3033

TABLE 4 (Continued)

	Number	r of acqui	sitions	Acquisi	tion spen	ding
Variables	(1)	(2)	(3)	(4)	(5)	(6)
% of Female external directors	-0.061	-0.060	-0.059	-0.329	-0.319	-0.320
	(.008)	(.009)	(.010)	(.011)	(.013)	(.013)
Board age diversity	-0.068	-0.070	-0.070	-0.070	-0.087	-0.089
	(.004)	(.003)	(.003)	(.585)	(.498)	(.491)
Board ethnic diversity	-0.020	-0.018	-0.017	-0.091	-0.080	-0.080
	(.357)	(.398)	(.421)	(.466)	(.522)	(.519)
% of Female TMT members	-0.010	-0.011	-0.010	-0.146	-0.138	-0.139
	(.619)	(.571)	(.598)	(.207)	(.233)	(.230)
CEO age	-0.079	-0.081	-0.081	-0.613	-0.630	-0.633
	(.001)	(.001)	(.001)	(.000)	(.000)	(.000)
CEO total compensation	0.052	0.052	0.051	0.396	0.395	0.390
	(.000)	(.000)	(.001)	(.001)	(.001)	(.001)
Options held	0.030	0.030	0.030	0.191	0.189	0.188
	(.002)	(.002)	(.002)	(.024)	(.025)	(.026)
Constant	0.585	0.580	0.583	-4.205	-4.165	-4.153
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)

Note: n = 10,351 for number of acquisitions; n = 8923 for acquisition spending. Two-tailed *p* values are report in parentheses. Year dummy variables are included but not reported.

proposition. As firm performance increases above that of social referents, the negative relationship between female CEOs and acquisition activity is attenuated and disappears.

4 | DISCUSSION

In this study, we challenge the extant conceptualization of a consistently conservative female executive by exploring how scrutiny impacts the relationship between CEO gender and strategic decision-making. We integrate CEO job demands theory (Geletkantycz & Boyd, 2011; Hambrick et al., 2005) and gender research (e.g., Eagly, 1987; Eagly & Carli, 2007; Oliver et al., 2018) to develop and test a contingency theory, proposing that scrutiny will moderate the relationship between CEO gender and acquisition activity. We find strong support for our theory in three high-scrutiny contexts—dynamic industries, high media coverage, and high relative board power. Our study makes several important contributions and suggests many avenues for future research. First, consistent with prior research looking at board and TMT gender diversity (Chen et al., 2016; Huang & Kisgen, 2013), we find a negative main effect relationship between female CEOs in high-scrutiny contexts but is exaggerated in low-scrutiny contexts. This finding extends prior research speculating the relationship between gender and acquisition activity is more nuanced than currently argued (Jeong & Harrison, 2017), and adds credence to recent claims

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that because "gender research in the upper echelon is in its infancy," we have much to uncover (Steinbach et al., 2016, p. 151).

We believe our findings are important, as they hold the potential to shift the conversation around CEO gender to a broader view that considers how the specific contexts in which these CEOs operate influence how they seek, filter, and interpret information during decision-making (see Steinbach et al., 2019). Future research would benefit by considering additional contexts that may differentially shape male and female CEOs' information processing and their decisions and outcomes. Additionally, although we focused on three contexts where we believe scrutiny is particularly high, there are other contexts in which CEOs are likely to experience high scrutiny. Based on our proposition, we believe that other forms of scrutiny will have a similar effect as our hypothesized variables. For example, when firms are highly diversified, they face scrutiny from stakeholders in a wider range of industries (Kang, 2013). Similarly, firms with high levels of internationalization are likely to be exposed to scrutiny across multiple countries. Finally, research suggests that high-reputation firms may face extra scrutiny from external audiences (Rhee & Haunschild, 2006; Zavyalova et al., 2016). We encourage future research to examine these and other high-scrutiny contexts.

Another important contribution of our research is our integration of gender-based information processing research (Meyers-Levy, 1989). This research has demonstrated that men and women differ in how they process information, with women engaged in more detailed and effortful consideration of available data (Dulebohn et al., 2016; Meyers-Levy, 1989; Meyers-Levy & Sternthal, 1991). As we argued, this understanding provides a compelling and parsimonious explanation for previous research on gender differences in acquisition activity. To be clear, we do not believe that either type of information processing is inherently better. Indeed, rapid and focused information processing may have the advantage of allowing CEOs to quickly seize upon quality acquisition opportunities that could otherwise be missed (e.g., McNamara et al., 2008). In contrast, more deliberate information processing may allow CEOs to avoid bad decisions by conducting careful due diligence and avoiding deals that are a poor strategic or cultural fit (Steinbach et al., 2019).

Further, it is also possible that contingencies exist that would lead female CEOs with certain characteristics to acquire at different rates from other female CEOs (see Dwivedi et al., 2018; Ingersoll et al., 2019). For example, social class origins (Kish-Gephart & Campbell, 2015) or birth order (Campbell et al., 2019) may lead some female CEOs to acquire more, yet others to acquire less. Scholars wishing to explore this avenue of research could draw on a wealth of prior upper echelons research (Hambrick, 2007; Hambrick & Mason, 1984), demonstrating the influence of CEO background, experiences, and dispositional attributes on strategic outcomes (Busenbark et al., 2016). Indeed, much of this and other prior upper echelon work has been conducted on samples containing very few female CEOs (Ingersoll et al., 2019). It is possible, therefore, that some established upper echelon relationships will no longer hold as the number of female executives continues to rise. We expect that as the number of women CEOs increases, additional opportunities to study how these factors influence female CEOs' decision-making will arise. We believe scholars will benefit by exploring how masculinity and gender-based experiences shape male CEOs' decisions just as it shapes those of female CEOs (Fernandez-Mateo & Kaplan, 2018; Mazei et al., 2021).

Our findings also contribute to CEO job demand research. Our theory and findings suggest that not all job demands are equally relevant in all circumstances. Future research should continue to explore different types of job demands to examine whether CEOs react differently based on the specific demand they face. For example, one avenue would be to build on research suggesting a

3035

difference between the quantitative and qualitative dimensions of CEO job demands (Chen, 2015). More directly building on our study, scholars should assess whether other job demand contexts attenuate (or amplify) the difference between male and female CEO acquisition activity. Indeed, one recent study found that the difference in risk-taking propensity between female CEOs and male CEOs is amplified during an economic downturn (Shropshire et al., 2021). Future research could thus examine whether an economic downturn is a different type of job demand or whether it reflects a low-scrutiny context. Consistent with our findings, it is possible that scrutiny on individual firms decreases when the economy is struggling. While in dynamic environments, there is substantial variance in performance over time and across industries leading stakeholders to closely scrutinize firms (Gamache et al., 2019), an economic downturn may focus stakeholders more broadly on economy-wide struggles than on any individual firm.

Further, most prior executive job demands research focuses on the idea that job demands strengthen the association between executive's natural characteristics and their strategic choices. Scholars familiar with this research might thus expect that job demands would exaggerate the conservative nature of female CEOs. In contrast, we focus on information processing differences between men and women and show that scrutiny reduces the cautiousness of female CEOs toward acquisitions. As such, we believe our findings may provide evidence that female CEOs are not naturally conservative decision-makers. Indeed, our results are consistent with the assertion that the gender-based differences in acquisition activity are driven by information processing differences, not inherent differences in risk preferences.

Additionally, our study contributes to research exploring the antecedents of acquisition activity. This work has demonstrated that CEO attributes, such as personality (Malhotra et al., 2018), self-concept (e.g., Chatterjee & Hambrick, 2007; Hayward & Hambrick, 1997), and motivational orientation (e.g., Gamache et al., 2015; Gamache & McNamara, 2019) can shape CEOs' proclivity to acquire. Building on recent work that suggests executive gender plays a role in shaping acquisition activity (Chen et al., 2016; Huang & Kisgen, 2013), we show the important moderating effect of scrutiny. While we focused on the decision to acquire, future research should consider whether gender differences shape other aspects of the acquisition process, such as post-merger integration efforts. It is possible that under high scrutiny, female CEOs increase their acquisition activity yet find ways to do so more cautiously, perhaps by more slowly integrating the two companies.

Finally, our study has the potential to spark future corporate governance research. For example, scholars can benefit by examining the differences between individual- and firm-level risk preferences. Although we believe that gender information processing differences provide a convincing reason why female CEOs acquire less than male CEOs, individual risk preferences may play a role (e.g., Jeong & Harrison, 2017). Importantly, it is possible that individual risk preferences and firm risk preferences may vary in contexts such as acquisitions creating agency issues for firm shareholders (Devers et al., 2013). Indeed, some CEOs may believe that it is personally less risky to engage in acquisition activity when they are being scrutinized. Thus, it could be possible that some CEOs are increasing firm risk while simultaneously keeping their own personal risk in check.

In conclusion, our study shows that the relationship between executive gender and acquisition activity is more nuanced than previously theorized. We show that in high-scrutiny contexts—in the form of dynamic industry conditions, intense media coverage, or high board power relative to the CEO—the difference between male and female CEO acquisition activity disappears. In contrast, when these forms of scrutiny are low, the difference between male and female CEOs' acquisition activity is exaggerated. We hope our work spurs additional research in the areas of gender differences in the upper echelon, strategic decision-making, and governance.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in SDC Mergers & Acquisitions Database, Institutional Shareholder Services Database, Execucomp, Compustat, and Ravenenpack News Analytics Database.

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REFERENCES

- Albanesi, S., Olivetti, C., & Prados, M. J. (2015). Gender and dynamic agency: Theory and evidence on the compensation of top executives. Federal Reserve Bank of New York Staff Reports (p. 718).
- Bakker, R. M., & Shepherd, D. A. (2017). Pull the plug or take the plunge: Multiple opportunities and the speed of venturing decisions in the Australian mining industry. *Academy of Management Journal*, 60(1), 130–155.
- Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, *116*(1), 261–292.
- Baum, J. R., & Wally, S. (2003). Strategic decision speed and firm performance. *Strategic Management Journal*, 24(11), 1107–1129.
- Bednar, M. K., Boivie, S., & Prince, N. R. (2013). Burr under the saddle: How media coverage influences strategic change. Organization Science, 24(3), 910–925.
- Bell, E., & Sinclair, A. (2016). Bodies, sexualities and women leaders in popular culture: From spectacle to metapicture. *Gender in Management: An International Journal*, *31*, 322–338.
- Bertrand, M. (2011). New perspectives on gender. In D. Card & O. Ashenfelter (Eds.), *Handbook of labor economics* (Vol. 4, Part B, pp. 1543–1590). Elsevier.
- Bun, M. J., & Harrison, T. D. (2019). OLS and IV estimation of regression models including endogenous interaction terms. *Econometric Reviews*, 38(7), 814–827.
- Busenbark, J. R., Graffin, S. D., Campbell, R. J., & Lee, E. Y. (2021). A marginal effects approach to interpreting main effects and moderation. *Organizational Research Methods*, *25*(1), 147–169.
- Busenbark, J. R., Krause, R., Boivie, S., & Graffin, S. D. (2016). Toward a configurational perspective on the CEO: A review and synthesis of the management literature. *Journal of Management*, 42(1), 234–268.
- Busenbark, J. R., Lange, D., & Certo, S. T. (2017). Foreshadowing as impression management: Illuminating the path for security analysts. *Strategic Management Journal*, *38*(12), 2486–2507.
- Busenbark, J. R., Yoon, H., Gamache, D. L., & Withers, M. C. (2022). Omitted variable bias: Examining management research with the impact threshold of a confounding variable (ITCV). *Journal of Management*, 48(1), 17–48.
- Campbell, R. J., Jeong, S.-H., & Graffin, S. D. (2019). Born to take risk? The effect of CEO birth order on strategic risk taking. *Academy of Management Journal*, 62(4), 1278–1306.
- 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*(6), 749–778.
- Certo, S. T., Withers, M. C., & Semadeni, M. (2017). A tale of two effects: Using longitudinal data to compare within-and between-firm effects. *Strategic Management Journal*, *38*, 1536–1556.

- 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(3), 351–386.
- Chen, G., Crossland, C., & Huang, S. (2016). Female board representation and corporate acquisition intensity. *Strategic Management Journal*, *37*(2), 303–313.
- Chen, G. (2015). Initial compensation of new CEOs hired in turnaround situations. Strategic Management Journal, 36(12), 1895–1917.
- Chin, M., Hambrick, D. C., & Treviño, L. K. (2013). Political ideologies of CEOs: The influence of executives' values on corporate social responsibility. *Administrative Science Quarterly*, 58(2), 197–232.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. Journal of Management, 37(1), 39–67.
- Connelly, B. L., Tihanyi, L., Ketchen, D. J., Carnes, C. M., & Ferrier, W. J. (2017). Competitive repertoire complexity: Governance antecedents and performance outcomes. *Strategic Management Journal*, 38(5), 1151– 1173.
- Daily, C. M., Certo, S. T., & Dalton, D. R. (1999). A decade of corporate women: Some progress in the boardroom, none in the executive suite. *Strategic Management Journal*, 20(1), 93–99.
- Darley, W. K., & Smith, R. E. (1995). Gender differences in information processing strategies: An empirical test of the selectivity model in advertising response. *Journal of Advertising*, 24(1), 41–56.
- Deb, P., David, P., O'Brien, J. P., & Duru, A. (2019). Attainment discrepancy and investment: Effects on firm performance. Journal of Business Research, 99, 186–196.
- Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. Administrative Science Quarterly, 29(1), 52–73.
- 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(6), 1679–1703.
- Devers, C. E., Wiseman, R. M., & Holmes, R. M. (2007). The effects of endowment and loss aversion in managerial stock option valuation. Academy of Management Journal, 50(1), 191–208.
- Devers, C. E., Wuorinen, S., McNamara, G., Haleblian, J., Gee, I. H., & Kim, J. (2020). An integrative review of the emerging behavioral acquisition literature: Charting the next decade of research. Academy of Management Annals, 14(2), 869–907.
- Drake, M. S., Jennings, J., Roulstone, D. T., & Thornock, J. R. (2016). The comovement of investor attention. Management Science, 63(9), 2847–2867.
- Dulebohn, J. H., Davison, R. B., Lee, S. A., Conlon, D. E., McNamara, G., & Sarinopoulos, I. C. (2016). Gender differences in justice evaluations: Evidence from fMRI. *Journal of Applied Psychology*, 101(2), 151–170.
- Dwivedi, P., Joshi, A., & Misangyi, V. F. (2018). Gender-inclusive gatekeeping: How (mostly male) predecessors influence the success of female CEOs. Academy of Management Journal, 61(2), 379–404.
- Eagly, A. H. (1987). Sex differences in social behavior: A social interpretation. Lawrence Erlbaum.
- Eagly, A. H., & Carli, L. L. (2007). Through the labyrinth: The truth about how women become leaders. Harvard Business Schoo Press.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573–598.
- Faccio, M., Marchica, M.-T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, 39, 193–209.
- Fernandez-Mateo, I., & Kaplan, S. (2018). Gender and organization science: Introduction to a virtual special issue. Organization Science, 29(6), 1229–1236.
- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). Strategic leadership: Theory and research on executives, top management teams, and boards. Oxford University Press.
- Fiss, P. C., & Zajac, E. J. (2006). The symbolic management of strategic change: Sensegiving via framing and decoupling. *Academy of Management Journal*, 49(6), 1173–1193.
- Frank, K. A., Maroulis, S. J., Duong, M. Q., & Kelcey, B. M. (2013). What would it take to change an inference? Using Rubin's causal model to interpret the robustness of causal inferences. *Educational Evaluation and Policy Analysis*, 35(4), 437–460.
- Gamache, D. L., & McNamara, G. (2019). Responding to bad press: How CEO temporal focus influences sensitivity to negative media coverage of acquisitions. *Academy of Management Journal*, 62(3), 918–943.

3038 WILEY SMS Strategic Management Journal

- Gamache, D. L., McNamara, G., Graffin, S. D., Kiley, J. T., Haleblian, J., & Devers, C. E. (2019). Impression offsetting as an early warning signal of low CEO confidence in acquisitions. *Academy of Management Journal*, 62(5), 1307–1332.
- 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(4), 1261–1282.
- Garg, V. K., Walters, B. A., & Priem, R. L. (2003). Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic Management Journal*, 24(8), 725–744.
- Geletkantycz, M. A., & Boyd, B. K. (2011). CEO outside directorships and firm performance: A reconciliation of agency and embeddness views. Academy of Management Journal, 54(2), 335–352.
- Gino, F., Wilmuth, C. A., & Brooks, A. W. (2015). Compared to men, women view professional advancement as equally attainable, but less desirable. *Proceedings of the National Academy of Sciences of the United States of America*, 112(40), 12354–12359.
- Glass, C., & Cook, A. (2016). Leading at the top: Understanding women's challenges above the glass ceiling. *The Leadership Quarterly*, 27(1), 51–63.
- Golden, B. R., & Zajac, E. J. (2001). When will boards influence strategy? Inclination x power = strategic change. Strategic Management Journal, 22(12), 1087–1111.
- Graffin, S. D., Wade, J. B., Porac, J. F., & McNamee, R. C. (2008). The impact of CEO status diffusion on the economic outcomes of other senior managers. Organization Science, 19(3), 457–474.
- Graham, J. F., Stendardi, E. J., Myers, J. K., & Graham, M. J. (2002). Gender differences in investment strategies: An information processing perspective. *International Journal of Bank Marketing*, 20(1), 17–25.
- Graham, J. R., Harvey, C. R., & Puri, M. (2013). Managerial attitudes and corporate actions. Journal of Financial Economics, 109(1), 103–121.
- Gupta, V. K., Mortal, S., Chakrabarty, B., Guo, X., & Turban, D. B. (2020). CFO gender and financial statement irregularities. Academy of Management Journal, 63(3), 802–831.
- Gupta, V. K., Mortal, S. C., & Guo, X. (2018). Revisiting the gender gap in CEO compensation: Replication and extension of Hill, Upadhyay, and Beekun's (2015) work on CEO gender pay gap. *Strategic Management Jour*nal, 39(7), 2036–2050.
- Gupta, V. K., Mortal, S. C., Silveri, S., Sun, M., & Turban, D. B. (2020). You're fired! Gender disparities in CEO dismissal. *Journal of Management*, 46(4), 560–582.
- 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(3), 469–502.
- Hambrick, D. C. (2007). Upper echelons theory: An update. Academy of Management Review, 32(2), 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(3), 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(2), 193–206.
- Harris, J., & Bromiley, P. (2007). Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. Organization Science, 18(3), 350–367.
- Haynes, K. T., & Hillman, A. (2010). The effect of board capital and CEO power on strategic change. Strategic Management Journal, 31(11), 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(1), 103–127.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, *57*(4), 657–674.
- Henderson, A. D., Miller, D., & Hambrick, D. C. (2006). How quickly do CEOs become obsolete? Industry dynamism, CEO tenure, and company performance. *Strategic Management Journal*, 27(5), 447–460.
- Hitt, M. A., Ireland, R. D., & Harrison, J. S. (2006). Mergers and acquisitions: A value creating or value destroying strategy. In *The Blackwell handbook of strategic management* (pp. 384–408). Blackwell Publishers Ltd.
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822–839.

- Ingersoll, A. R., Glass, C., Cook, A., & Olsen, K. J. (2019). Power, status and expectations: How narcissism manifests among women CEOs. *Journal of Business Ethics*, 158(4), 893–907.
- Iyer, D. N., & Miller, K. D. (2008). Performance feedback, slack, and the timing of acquisitions. Academy of Management Journal, 51(4), 808–822.
- 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(4), 1219–1252.
- Kang, J. (2013). The relationship between corporate diversification and corporate social performance. Strategic Management Journal, 34(1), 94–109.
- Kaplan, S., & Walley, N. (2016). The risky rhetoric of female risk aversion (pp. 49–54). Stanford Social Innovation Review, Spring.
- Kennedy, P. (2008). A guide to econometrics (6th ed.). MIT Press.
- 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(1), 26–60.
- Kim, J.-Y. J., Finkelstein, S., & Haleblian, J. J. (2015). All aspirations are not created equal: The differential effects of historical and social aspirations on acquisition behavior. Academy of Management Journal, 58(5), 1361–1388.
- 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(2), 187–200.
- Kish-Gephart, J. J., & Campbell, J. T. (2015). You don't forget your roots: The influence of CEO social class background on strategic risk taking. Academy of Management Journal, 58(6), 1614–1636.
- Klein, F. B., Chaigneau, P., & Devers, C. E. (2021). CEO gender-based termination concerns: Evidence from initial severance agreements. *Journal of Management*, 47(3), 567–596.
- Kolev, K. D., & McNamara, G. (2020). Board demography and divestitures: The impact of gender and racial diversity on divestiture rate and divestiture returns. *Long Range Planning*, 53(2), 101881.
- Kolhatkar, S. (2018). Indra Nooyi and the vanishing female C.E.O.
- Krause, R. (2017). Being the CEO's boss: An examination of board chair orientations. Strategic Management Journal, 38(3), 697–713.
- Kulich, C., Trojanowski, G., Ryan, M. K., Haslam, S. A., & Renneboog, L. D. R. (2011). Who gets the carrot and who gets the stick? Evidence of gender disparities in executive nemuneration. *Strategic Management Journal*, 32(3), 301–321.
- Kuusela, P., Keil, T., & Maula, M. (2017). Driven by aspirations, but in what direction? Performance shortfalls, slack resources, and resource-consuming vs. resource-freeing organizational change. *Strategic Management Journal*, 38(5), 1101–1120.
- Lee, J., Lee, J. M., & Kim, J.-Y. (2023). The role of attribution in learning from performance feedback: Behavioral perspective on the choice between alliances and acquisitions. Academy of Management Journal, 66, 578–603.
- Lee, P. M., & James, E. H. (2007). She'-E-Os: Gender effects and investor reactions to the announcements of top executive appointments. *Strategic Management Journal*, 28(3), 227–241.
- Levi, M., Li, K., & Zhang, F. (2014). Director gender and mergers and acquisitions. Journal of Corporate Finance, 28, 185–200.
- Li, Q., Maggitti, P. G., Smith, K. G., Tesluk, P. E., & Katila, R. (2013). Top management attention to innovation: The role of search selection and intensity in new product introductions. *Academy of Management Journal*, 56(3), 893–916.
- Lin, C., Massa, M., & Zhang, H. (2014). Mutual funds and information diffusion: The role of country-level governance. *The Review of Financial Studies*, 27(11), 3343–3387.
- Malhotra, S., Reus, T. H., Zhu, P., & Roelofsen, E. M. (2018). The acquisitive nature of extraverted CEOs. Administrative Science Quarterly, 63(2), 370–408.
- Malmendier, U., Opp, M. M., & Saidi, F. (2016). Target revaluation after failed takeover attempts: Cash versus stock. Journal of Financial Economics, 119(1), 92–106.
- Mazei, J., Zerres, A., & Hüffmeier, J. (2021). Masculinity at the negotiation table: A theory of men's negotiation behaviors and outcomes. Academy of Management Review, 46(1), 108–127.
- McNamara, G., Vaaler, P. M., & Devers, C. (2003). Same as it ever was: The search for evidence of increasing hypercompetition. *Strategic Management Journal*, 24(3), 261–278.

3040 WILEY SMS Strategic Management Journal

- 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*(1), 113–130.
- Meister, A., Jehn, K. A., & Thatcher, S. M. (2014). Feeling misidentified: The consequences of internal identity asymmetries for individuals at work. Academy of Management Review, 39(4), 488–512.
- Meister, A., Sinclair, A., & Jehn, K. A. (2017). Identities under scrutiny: How women leaders navigate feeling misidentified at work. *The Leadership Quarterly*, 28(5), 672–690.
- Meyers-Levy, J. (1989). The influence of a brand name's association set size and word frequency on brand memory. Journal of Consumer Research, 16(2), 197–207.
- Meyers-Levy, J., & Maheswaran, D. (1991). Exploring differences in males' and females' processing strategies. Journal of Consumer Research, 18(1), 63–70.
- Meyers-Levy, J., & Sternthal, B. (1991). Gender differences in the use of message cues and judgments. Journal of Marketing Research, 28(1), 84–96.
- Meznar, M. B., & Nigh, D. (1995). Buffer or bridge? Environmental and organizational determinants of public affairs activities in American firms. Academy of Management Journal, 38(4), 975–996.
- 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(4), 701–722.
- Nadkarni, S., & Chen, J. (2014). Bridging yesterday, today, and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction. Academy of Management Journal, 57(6), 1810–1833.
- Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A crossnational meta-analysis. *Journal of Management*, 45(6), 2538–2569.
- Oliver, A. G., Krause, R., Busenbark, J. R., & Kalm, M. (2018). BS in the boardroom: Benevolent sexism and board chair orientations. *Strategic Management Journal*, 39(1), 113–130.
- Park, S. H., & Westphal, J. D. (2013). Social discrimination in the corporate elite: How status affects the propensity for minority CEOs to receive blame for low firm performance. *Administrative Science Quarterly*, 58(4), 542–586.
- Perryman, A. A., Butler, F. C., Martin, J. A., & Ferris, G. R. (2010). When the CEO is ill: Keeping quiet or going public? *Business Horizons*, 53(1), 21–29.
- Petty, R. E., Brinol, P., & Priester, J. R. (2009). Mass media attitude change: Implications of the elaboration likelihood model of persuasion. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 125–164). Routledge.
- Pfarrer, M. D., Pollock, T. G., & Rindova, V. P. (2010). A tale of two assets: The effects of firm reputation and celebrity on earning surprises and investors' reactions. Academy of Management Journal, 53(5), 1131–1152.
- Putrevu, S. (2001). Exploring the origins and information processing differences between men and women: Implications for advertisers. Academy of Marketing Science Review, 10(1), 1–14.
- Qian, C., Cao, Q., & Takeuchi, R. (2013). Top management team functional diversity and organizational innovation in China: The moderating effects of environment. *Strategic Management Journal*, 34(1), 110–120.
- Quigley, T. J., Crossland, C., & Campbell, R. J. (2017). Shareholder perceptions of the changing impact of CEOs: Market reactions to unexpected CEO deaths, 1950–2009. *Strategic Management Journal*, 38(4), 939–949.
- Reina, C. S., Peterson, S. J., & Zhang, Z. (2017). Adverse effects of CEO family-to-work conflict on firm performance. Organization Science, 28(2), 228–243.
- 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(3), 667–683.
- Rhee, M., & Haunschild, P. R. (2006). The liability of good reputation: A study of product recalls in the US automobile industry. Organization Science, 17(1), 101–117.
- Ryan, M. K., & Haslam, S. A. (2007). The glass cliff: Exploring the dynamics surrounding the appointment of women to precarious leadership positions. *Academy of Management Review*, 32(2), 549–572.
- 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(11), 1247–1268.
- 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.

- Shropshire, C., Peterson, S., Bartels, A. L., Amanatullah, E. T., & Lee, P. M. (2021). Are female CEOs really more risk averse? Examining economic downturn and other-orientation. *Journal of Leadership & Organizational Studies*, 28(2), 185–206.
- Smales, L. A. (2014). Non-scheduled news arrival and high-frequency stock market dynamics: Evidence from the Australian Securities Exchange. *Research in International Business and Finance*, 32, 122–138.
- Smith, A. N., Watkins, M. B., Ladge, J. J., & Carlton, P. (2019). Making the invisible visible: Paradoxical effects of intersectional invisibility on the career experiences of executive black women. Academy of Management Journal, 62(6), 1705–1734.
- Steinbach, A., Devers, C. E., McNamara, G., & Li, J. (2016). Peering into the executive mind: Expanding our understanding of the motives for acquisitions. In Advances in mergers and acquisitions (pp. 145–160). Emerald Group Publishing Limited.
- Steinbach, A., Gamache, D. L., & Johnson, R. E. (2019). Don't get it misconstrued: Construal level shifts and flexibility in the upper echelons. Academy of Management Review, 44(4), 871–895.
- 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.
- Swann, W. B., Jr., Johnson, R. E., & Bosson, J. K. (2009). Identity negotiation at work. *Research in Organizational Behavior*, 29, 81–109.
- Tang, Y., Li, J., & Yang, H. (2015). What I see, what I do how executive hubris affects firm innovation. Journal of Management, 41(6), 1698–1723.
- Westphal, J. D., & Stern, I. (2007). Flattery will get you everywhere (especially if you are a male Caucasian): How ingratiation, boardroom behavior, and demographic minority status affect additional board appointments at US companies. Academy of Management Journal, 50(2), 267–288.
- Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, dynamic similarity, and new director selection. Administrative Science Quarterly, 40(1), 60–83.
- Westphal, J. D., & Zajac, E. J. (2013). A behavioral theory of corporate governance: Explicating the mechanisms of socially situated and socially constituted agency. *The Academy of Management Annals*, 7(1), 607–661.
- Wiersema, M. F., & Bowen, H. P. (2008). Corporate diversification: The impact of foreign competition, industry globalization, and product diversification. *Strategic Management Journal*, 29(2), 115–132.
- Wiersema, M. F., & Bowen, H. P. (2009). The use of limited dependent variable techniques in strategy research: Issues and methods. *Strategic Management Journal*, 30(6), 679–692.
- Women in the Workplace Study. (2015). Leanin.org and McKinsey & Company.
- Wooldridge, J. M. (2009). Introductory econometrics: A modern approach (4th ed.). South-Western Cengage Learning.
- Xu, D., Zhou, K. Z., & Du, F. (2019). Deviant versus aspirational risk taking: The effects of performance feedback on bribery expenditure and R&D intensity. *Academy of Management Journal*, 62(4), 1226–1251.
- Yim, S. (2013). The acquisitiveness of youth: CEO age and acquisition behavior. Journal of Financial Economics, 108, 250–273.
- Zajac, E. J., & Westphal, J. D. (1996). Who shall succeed? How CEO board preferences and power affect the choice of new CEOs. Academy of Management Journal, 39(1), 64–90.
- 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(1), 253–276.
- Zhu, D. H., Jia, L., & Li, F. (2022). Too much on the plate? How executive job demands harm firm innovation and reduce share of exploratory innovations. *Academy of Management Journal*, 65(2), 606–633.

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