

DO FEMALE AND ETHNICALLY DIVERSE EXECUTIVES ENDURE INEQUITY IN THE CEO POSITION OR DO THEY BENEFIT FROM THEIR MINORITY STATUS? AN EMPIRICAL EXAMINATION

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We present competing hypotheses regarding whether gender and ethnic minority CEOs endure inequities resulting in lower compensation and higher likelihood of job exit or benefit from their valuable, rare, and inimitable minority status, resulting in higher compensation and lower likelihood of job exit. Using a longitudinal sample, we find support for the resource-based hypothesis regarding compensation that suggests CEOs benefit from their minority status to receive higher compensation than white male CEOs receive. However, we also find mixed support for our hypotheses relating CEO minority status to the likelihood of exit. We find that the effects of minority status on likelihood of exit are significantly different for female and ethnic minority CEOs such that the former relationship is negative while the latter is positive. Copyright © 2014 John Wiley & Sons, Ltd.

INTRODUCTION

Many researchers have explored the existence of workplace inequities at lower levels of the organizational hierarchy (cf. Kunze, 2008; Leicht, 2008; Smith, 1998) for persons of minority status, defined here as female or ethnically diverse individuals (e.g., Dreher, Lee, and Clerkin, 2011; Westphal and Stern, 2007). Extending this line of inquiry upwards to chief executive officers (CEOs) presents an interesting contrast, however. On the one hand, the literature on job-related schemas and stereotypes suggests that biases are manifest in situations where individuals are perceived as violating role expectations (Heilman *et al.*, 1989; Ilgen and Youtz,

1986; Oakley, 2000; Powell and Butterfield, 1997, 2002; Ridgeway and Correll, 2004). The fact that the CEO position has historically been occupied by white males suggests that non-white male CEOs may suffer from the effects of these biases (cf. Heilman and Okimoto, 2007; Powell, Butterfield, and Parent, 2002; Selody, 2010). For example, these biased beliefs may result in pay inequalities for CEOs who are not white males as well as mistreatment from evaluators and colleagues, thus leading to a higher rate of job exit (Altonji and Blank, 1999; Greenhaus and Parasuraman, 1993; Hom, Roberson, and Ellis, 2008; Mathews, Collins, and Cobb, 1974; Rudman, 1998).

In contrast, resource-based arguments grounded in economics (Barney, 1991) suggest the opposite: the sheer rarity and inimitability of female and ethnic minority CEOs (Bertrand and Hallock, 2001; Daily, Certo, and Dalton, 1999) may allow these executives to benefit upon being promoted

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to the CEO position (e.g., Barney and Wright, 1998; Carpenter, Sanders, and Gregersen, 2001; Lippman and Rumelt, 2003a, 2003b). More explicitly, resource-based arguments propose that possessing the valuable, rare, and inimitable resource of minority status may allow female and ethnic minority CEOs to receive higher compensation than their white male colleagues and more favorable treatment that results in a higher likelihood of maintaining their employment with a firm.

Despite the presence of conflicting theoretical views regarding biases in compensation and job exit for CEOs of minority status, there is a paucity of empirical research in this area. We address this lack of research by testing competing views to determine whether minority status is associated with higher or lower compensation and job exit at the CEO level. Utilizing a sample drawn from unregulated firms listed in the Compustat ExecuComp database over a 10-year period, we find that after accounting for factors that may determine executive pay (e.g., Core, Holthausen, and Larcker, 1999; Mehran, 1995; Tosi *et al.*, 2000), both female and ethnic minority CEOs receive higher compensation. This finding is consistent with arguments drawn from economic theory, which contend that female and ethnic minority CEOs will benefit from their rare and inimitable minority status (e.g., Barney and Wright, 1998; Carpenter *et al.*, 2001; Lippman and Rumelt, 2003a, 2003b) but challenges the view that, because the CEO position has historically been occupied by white males, job-related schemas and stereotypes associated with the view of the “typical” CEO will result in lower pay for CEOs of minority status.

While our results support economic arguments with respect to female and ethnic minority CEOs benefiting from their minority status to receive higher compensation, our analyses of the relationship between minority status and firm exit provided mixed support for the competing resource-based and minority discrimination views. Specifically, we find that the relationship between minority status and job exit is negative for female CEOs but positive for ethnic minority CEOs. Our findings offer a number of insights for theory and practice alike, and we conclude our study with a discussion of the implications of our research.

THEORY

Research suggests that women and ethnic minorities are less likely to both make it to the upper echelons

of a corporation and to receive compensation equal to that of their white male counterparts upon their ascension to the executive ranks (e.g., Bertrand and Hallock, 2001; Blau and Devaro, 2007; Blau and Kahn, 2000; Selody, 2010; Yap and Konrad, 2009). In general, individuals of minority status typically face “an invisible barrier that prevents them climbing the corporate ladder” and this “reality is accompanied by patterns of unequal compensation” (Kulich *et al.*, 2011: 303). Similarly, individuals of minority status who do break through to executive positions may endure disparate treatment by evaluators and colleagues (cf. Dreher *et al.*, 2011; Rudman *et al.*, 2012; West *et al.*, 2012) whether such treatment is intentional or not (Altonji and Blank, 1999; Oakley, 2000). For example, not only may the performance of high performing executives of minority status be attributed to factors other than ability (Greenhaus and Parasuraman, 1993; Hom *et al.*, 2008) but females and ethnic minorities tend to receive greater scrutiny and criticism while being evaluated more unfavorably (e.g., Haslam and Ryan, 2008; Kraiger and Ford, 1985; Ryan and Haslam, 2007).

A primary theoretical mechanism explaining forms of employment discrimination against female and ethnic minority executives is that job-related schemas and stereotypes associated with executive positions lead to systematic biases against individuals who are not white males (e.g., Dreher *et al.*, 2011; Heilman *et al.*, 1989; Ilgen and Youtz, 1986; Lee and James, 2007; Oakley, 2000; Powell and Butterfield, 1997, 2002). Since the majority of CEOs are white males, perceptions regarding the typical CEO precipitate bias against executives of minority status because female and ethnic minority CEOs violate individuals’ expectations for the CEO position (Fiske and Taylor, 1991; Heilman and Okimoto, 2007; Kanter, 1977, 1989; Rudman and Kilianski, 2000; Shenhav, 1992). Theorists have long argued that the stereotypes of leadership positions result in biases against groups of individuals that have traditionally not occupied leadership positions. For example, Schein (1973: 95) argued that role stereotypes “effectuate the perception of women as being less qualified than men for high-level management positions” while Dewey (1952) and Bergmann (1971) noted similar relationships for African-Americans. Similarly, Ridgeway and Correll (2004) indicate that contemporary cultural beliefs about gender are such that men are generally viewed as being

more competent and agentic whereas women are considered to be less competent and more communal (see also Conway, Pizzamiglio, and Mount, 1996; Fiske *et al.*, 2002; Foschi, 2000; Smith *et al.*, 2013). Due to such beliefs, jobs are often “gendered” or “sex typed” such that employers direct men towards leadership roles and women towards other positions (Fernandez and Sosa, 2005; Lueptow, Garovich-Szabo, and Lueptow, 2001; Ridgeway, 1997). Similar occupational segregation exists for the advancement of ethnic minorities into leadership positions as well (e.g., Kaufman, 2002; Maume, 1999; Tomaskovic-Devey, 1993; Tomaskovic-Devey, Thomas, and Johnson, 2005).

Researchers note two related ways by which biases associated with role expectations affect executives (Eagly and Karau, 2002; Heilman, 1983, 2001). First, because white males dominate leadership and management positions, women and ethnic minorities may appear less usual or natural and, thus, are perceived as a bad fit for these positions (Heilman, 1995; Heilman and Okimoto, 2007; Heilman *et al.*, 1989; Lyness and Heilman, 2006). Second, women and ethnic minorities in leadership positions may seem “inappropriate or presumptuous when they display the agentic behaviors often required in these roles” (Koenig *et al.*, 2011: 617). The net effect of the two biases is that, regardless of whether female and ethnic minorities perform well in the role, the stereotypes associated with the position continue to trigger bias against individuals of minority status. Since female and ethnic minorities are perceived as less natural in the position, when they exhibit actions and behaviors expected of the position, the actions and behaviors appear inappropriate or out of place and may even be misattributed by the perceiver as a means of maintaining his or her stereotyped beliefs (Regan, Straus, and Fazio, 1974). Such misattribution may be detrimental in that evaluators may attribute favorable performance to external factors such as luck, whereas they may attribute unfavorable performance to internal factors and “poor fit.” Meta-analyses support these notions, finding that individuals of minority status endure a variety of biases when attaining positions traditionally occupied by nonminority groups (Eagly, Karau, and Makhijani, 1995; Eagly, Makhijani, and Klonsky, 1992; Swim *et al.*, 1989).

Extending theory on role stereotyping, biases associated with the CEO positions may adversely affect female and ethnic minorities who become

CEOs. Specifically, since there has historically been a dearth of non-white male executives (Daily *et al.*, 1999), individuals may hold biased beliefs about the performance of female and ethnic minorities who attain the CEO position (Bertrand and Halllock, 2001; Cappelli and Hamori, 2004; Selody, 2010). For example, the presence of biases may help explain why Lee and James (2007) find that reactions to the announcements of female CEOs are significantly more negative than announcements of their male counterparts. Similarly, Haslam and colleagues (2010: 492) suggest their finding that the stock market responds adversely to females on boards of directors is a “reflection of investors’ stereotypic beliefs” about females in director roles.

In a similar vein, Kulich and colleagues (2011) note that stereotypical perceptions about the CEO position affect how the board evaluates executives. In particular, because the CEO position has predominantly been held by white males (Catalyst, 2008; U.S. Census, 2009), board members may develop the expectation that a CEO is a white male and hold biases about CEOs of minority status. Boards may view female and ethnic minorities as a poor fit for the CEO position simply because these individuals do not fit preconceived expectations about who should be CEO (cf. Greenhaus and Parasuraman, 1993; Hom *et al.*, 2008; Oakley, 2000). Further, minority status CEOs may be regarded as individuals who are undeserving and who have advanced through favorable policies such as affirmative action (Landau, 1995; Pettigrew and Martin, 1987). As a result of the stereotype that CEOs are typically white males, board members may misattribute favorable outcomes associated with a female or ethnic minority CEO’s performance to factors outside of the CEO’s ability and actions while at the same time attributing unfavorable outcomes associated with the CEO to his/her inability, poor fit, or inappropriate action (Greenhaus and Parasuraman, 1993; Hom *et al.*, 2008; Regan *et al.*, 1974). Even after performing well, then, female and ethnic minority CEOs are less likely to receive compensation and pay raises commensurate with their ability and performance on the job. That is, because female and ethnic minorities violate role expectations, role performance during their tenure as CEOs that would normally result in a raise may be misattributed and, as a result, the board will be less likely to reward female or ethnic minority CEOs with a commensurate salary or pay raise. Thus, we hypothesize:

Hypothesis 1: Female and ethnic minority CEOs will be associated with lower compensation.

Another way that stereotypes associated with the CEO position may manifest biases detrimental to female and ethnic minority CEOs is a higher likelihood of exiting the CEO position relative to white males. Stereotypes are likely to result in female and ethnic minorities having a higher likelihood of exit from the CEO position in multiple ways. First, as we argued earlier, biased evaluations may result in minority status CEOs being less well compensated. In response to such treatment, female and ethnic minority CEOs are likely to seek voluntary exit from their position at a rate greater than their white male counterparts do (cf. Oakley, 2000). Second, evaluators' downward-biased beliefs about female and ethnic minorities' capabilities and subsequent discriminatory attributions of performance (Greenhaus and Parasuraman, 1993; Hom *et al.*, 2008) will likely lead to a higher likelihood of involuntary job exit via termination. In the context of CEOs, if boards believe that good performance is not the doing of female or ethnic minority CEOs but at the same time ascribe bad performance to those CEOs, then a CEO of minority status is in a "lose-lose" situation that will result in a greater likelihood of termination. Third, such biases may manifest themselves in group-level behaviors that make individuals of minority status feel less comfortable and drive them to leave their position voluntarily. In sheer numbers, executive settings are white male dominant. The fact that executive ranks contain a disproportionately small ratio of females or ethnic minorities affects behaviors of the majority group (i.e., white males) and leads minorities to seek new groups in favor of more equitable treatment (Altonji and Blank, 1999; Kanter, 1977). This differential treatment may include clear discrimination that can make female and ethnic minorities feel unwelcome and push them to exit their position as well as unintentional acts that nonetheless give rise to feelings of discomfort (Cortina, 2008). Thus, the situation is a "darned if they do, darned if they don't" for female and ethnic minority CEOs. On the one hand, members of the majority may be intentionally discriminatory (whether overtly or subtly) while on the other hand, members of the majority may be exceedingly conscious of overt differences, leading them to change how they act around minority colleagues (both overtly and subtly). In

either instance, CEOs of minority status are likely to feel both uncomfortable and more like outsiders. Further, members of the majority may not make accommodations vis-à-vis minorities, resulting in members of the minority feeling out of place. In either situation, the presence of overwhelmingly large ratios of white males in executive ranks puts female and ethnic minorities at a higher risk of leaving such positions. Therefore, we hypothesize that

Hypothesis 2: Female and ethnic minority CEOs will be associated with a higher likelihood of job exit.

Given the aforementioned stereotypes and biases, it is perhaps not surprising that evidence suggests that executives of minority status rarely attain CEO positions (Catalyst, 2008; U.S. Census, 2009). While the paucity of female and ethnic minority CEOs suggests that stereotypes may be manifest to their detriment, resource-based (Barney, 1991) arguments suggest that minority status executives who are able to attain CEO positions may actually benefit. That is, if female and ethnic minority CEOs are valuable to employers, their rare and inimitable minority status may be beneficial such that they can expect to receive higher pay (cf. Coff, 1999; Henderson and Fredrickson, 1996; Lippman and Rumelt, 2003a, 2003b). For example, Carpenter *et al.* (2001: 498) argue that, since international assignment experience is valuable, rare, and inimitable, possessing such experience "may provide CEOs with greater opportunity to bid up the price of their services."

Minority status CEOs are valuable in a number of ways. As Richard, Murthi, and Ismail (2007: 1213) note, "The most valuable natural resource in the world is not oil, diamonds, or even gold; it is the diverse knowledge, abilities, and skills that are immediately available from cultural diversity." In their firm-level, six-year longitudinal analysis on the impact of racial diversity in human resources, Richard *et al.* proposed and found support for a positive linear relationship between firm-level racial diversity and performance, measured as Tobin's *q*. Similarly, Dezso and Ross (2012) argue that female executives bring informational and social diversity benefits to organizations while also both enriching the behaviors exhibited by managers throughout the firm and motivating females at lower levels of the hierarchy. Further, the fact that female and ethnic

minority executives must overcome various barriers (e.g., Bertrand and Hallock, 2001; Blau and Devaro, 2007; Blau and Kahn, 2000; Selody, 2010; Yap and Konrad, 2009) and disparate treatment (e.g., Dreher *et al.*, 2011; Rudman *et al.*, 2012; West *et al.*, 2012) in their ascensions to the executive ranks suggests that those who survive to advance to CEO position may be particularly gifted and/or especially good at learning from and dealing with adversity. For example, Swaminathan (1996) finds that firms that survive the “trial-by-fire” of particularly adverse conditions at founding emerge particularly strong, and the same logic may apply to female and ethnic minority CEOs.

In line with these views, we contend that there are a number of ways female and ethnic minority CEOs are valuable. First, a female or ethnic minority CEO may provide a different perspective than a CEO who is a white male. Scholars argue that diverse executives can assist the firm not only in understanding the needs of a diverse target market but also in broadening decision making (Brammer, Millington, and Pavelin, 2007; Miller and Triana, 2009), both of which may be particularly valuable given that the majority of executives and board members are white males (Catalyst, 2008). Similarly, firms may benefit from the ethical perspectives that women and ethnic minorities bring to group decision making (e.g., Lane, 1995; Post, Rahman, and Rubow, 2011; Wang and Coffey, 1992). As a case in point, Gilligan (1982) and Gilligan and colleagues (1988) indicate that women and men may use different approaches in resolving moral conflicts, and research finds that women are more likely to make use of a care approach due to their focus on relationship building (Beekun *et al.*, 2010; Glover *et al.*, 2002). Given recent criticisms of corporate ethics, firms may wish to combat ethical issues by hiring a female CEO. Further, since the workforce is drastically more diverse than executive management (Dalton and Dalton, 2010), having a female or ethnic minority CEO demonstrates equity in human resource practices, and this equity can have positive implications for employees of minority status (Dezso and Ross, 2012; Krawiec, Conley, and Broome, 2013).

Beyond these valuable outcomes associated with female and ethnic minority CEOs, scholars note that various stakeholder groups including the news media, politicians, and business analysts as well as employee and supply lobby groups are exerting pressure on firms to promote minority executives

(Dalton and Dalton, 2010; Lee and James, 2007; Terjesen, Sealy, and Singh, 2009). Such calls can be viewed as yet another indicator that female and ethnic minority CEOs are valued and also suggest that firms may attempt to make a symbolic gesture (Porac, Wade, and Pollock, 1999; Wade, Porac, and Pollock, 1997; Westphal and Zajac, 1994; Zajac and Westphal, 1995) to capture the valuable goodwill and attention associated with employing minority status CEOs. In addition to their value, both scholarly research (e.g., Bertrand and Hallock, 2001; Daily *et al.*, 1999) and systematic records of the CEO population (Catalyst, 2008; U.S. Census, 2009) indicate that minority status is rare for CEOs. Similarly, minority status fits the definition of inimitability since an individual cannot simply acquire minority status (Barney, 1986, 1991; Lippman and Rumelt, 1982).

Further, qualitative evidence from interviews of directors and executives with experience in boards' selection processes supports the view that minority status is a valuable, rare, and inimitable resource that boards seek. Broome, Conley, and Krawiec (2011: 760) interviewed corporate directors, noting that respondents were “clear and nearly uniform in their statements” that minority status “had been a relevant consideration” when selecting executive-level candidates, while female and ethnic minority respondents noted their diversity “had been explicitly mentioned as a consideration in their selection.” Similarly, board members interviewed by Krawiec *et al.* (2013: 946) indicated that hiring diverse executives sends a strong signal to employees, noting “that’s where the cue is taken.” Given that female and ethnic minority CEOs are valuable, rare, and inimitable, consistent with the resource-based contentions outlined above, CEOs may benefit from their minority status by extracting a higher compensation in exchange for their services. Therefore, we hypothesize that

Hypothesis 3: Female and ethnic minority CEOs will be associated with higher compensation.

Another way that female and ethnic minority CEOs may be able to benefit from their minority status is by having a lower likelihood of job exit, which is possible for a number of reasons. First, the value, rarity, and inimitability of their minority status may provide them with additional leverage that can help

them remain in their job when, everything else being equal, they would be terminated and exit involuntarily. As Fama (1980) notes, whether boards of directors “settle up” with CEOs by removing them from their positions may be contingent upon a number of factors. For instance, Wowak, Hambrick, and Henderson (2011) find that boards consider the value of their CEOs when determining how to settle up with CEOs in the face of poor performance. Given this consideration in settling up, minority status CEOs may benefit from the value of their minority status to “buy time” on the job. Similarly, the heightened interest in, and attention given to, minority status CEOs and their treatment from various stakeholders (Dalton and Dalton, 2010; Lee and James, 2007; Terjesen *et al.*, 2009; Valenti, 2008) may also benefit these CEOs. That is, in light of the rise of media entertainment and the presentation of material to generate ratings rather than purely factual reporting (Gans, 2005; Koh, 2010), boards may wish to avoid the possible negative ramifications associated with the termination of a minority status CEO. For example, whether or not facts warrant termination, boards may consider the possibility that termination will attract unwanted attention from the media owing to the heightened interest in minority status CEOs. Thus, boards may be more reluctant to remove minority status CEOs and wait for additional support for termination, which, in essence, makes minority status valuable to minorities. As such, CEOs’ minority status buys them time, lowering the likelihood of job exit in comparison to white male CEOs. As an additive effect of buying time, minority CEOs may benefit by having more time to improve the fortunes of the firm, in turn extending tenure and lowering the likelihood of job exit.

In addition, minority CEOs may have a lower likelihood of job exit because their minority status results in treatment that leads them to stay. In particular, we argued in Hypothesis 3 that female and ethnic minority CEOs value, rarity, and inimitability will result in higher compensation—an extension of these arguments is that minority status CEOs will be treated as valuable, rare, and inimitable resources. Acknowledgement that female and ethnic minority CEOs are valuable, rare, and inimitable may result in the problems associated with ill treatment arising from their minority status to abate since firms will not want such a resource to choose to exit and in turn provide value to another firm. As a result, minority executives may feel more welcome in the focal firm and, in turn, remain in

their current position rather than exiting the job voluntarily. Cumulatively, these arguments lead us to hypothesize that

Hypothesis 4: Female and ethnic minority CEOs will be associated with a lower likelihood of job exit.

METHODS

Sample

To test our hypotheses, we used a sample of firms drawn from Compustat’s ExecuComp database over a 10-year period beginning in 1996. We chose 1996 as a starting point to avoid issues associated with data reporting that are documented in the databases we utilize in years prior to 1996 (e.g., Guenther and Rosman, 1994; Kahle and Walkling, 1996). Our ending point was chosen to avoid idiosyncrasies associated with the financial crises that affected CEO compensation and job exit (cf. Acharya *et al.*, 2009; Bernanke, 2010). We excluded utilities and financial services firms due to differences in regulation and policies within these firms (e.g., McGahan and Porter, 1997; McNamara, Aime, and Vaaler, 2005). We used Compustat for accounting and financial data and ExecuComp for compensation data, while equity return information came from the Center for Research in Security Prices (CRSP). Data on board characteristics, CEO gender, and CEO ethnicity were obtained from the Risk Metrics database. For a firm-year observation to be included in our primary sample, data had to be available on the market value of equity, total assets, and the compensation paid to a CEO in any given year and had to match RiskMetrics data on the minority status of the CEO as well. This led to a result of 10,060 firm-year observations covering 2,255 unique firms where data was available on CEO gender and 7,479 firm-year observations in 1,678 unique firms where data was available on CEO ethnicity.

Measures

Dependent variables

Our dependent variables were the total annual compensation paid by a firm to its CEO and whether the CEO exited their job. For *CEO compensation*, we combined both short-term and long-term compensation components since the exclusion of

either form would have underestimated the CEO's total remuneration (Lambert, Larcker, and Weigelt, 1993; Siegel and Hambrick, 2005) and took the natural log of this total. Specifically, our measure includes CEO's annual salary, bonus, other annual compensation, restricted stock grants, long-term incentive plan (LTIP) payouts, and the value of options granted using the Black-Scholes valuation methodology (e.g., Graffin, Carpenter, and Boivie, 2011; Graffin *et al.*, 2008; Wade *et al.*, 2006). We measured *CEO job exit* with a binary indicator that took a value of 1 if a firm reported a change in its CEO position in a given year and 0 otherwise. In our sample, there were 1,261 CEO job exits, 19 of which were for female CEOs and 26 of which were for an ethnic minority CEO. The sample included a single job exit for an ethnic minority female CEO.

Independent variables

Our primary independent variable was whether a firm had a CEO of minority status, which we defined as being either a female or an ethnic minority. We used RiskMetrics to identify whether a CEO was male or female and whether a CEO was an ethnic minority, defined as belonging to African-American, Asian, Caucasian, Hispanic, and Native American ethnicities. We merged RiskMetrics data on the gender and ethnicity of CEOs with ExecuComp files, which identified the CEO of a firm in a given year. We measured *Minority CEO* with a binary indicator equal to 1 if a CEO was either a female or an ethnic minority and 0 if the CEO was a white male. We also assessed whether results were consistent for the two types of minority CEOs—females and ethnic minorities. The presence of either of these two minority CEOs was measured with binary indicator variables that took a value of 1 if a firm reported having a *Female CEO* and a value of 0 for a male, and similarly a value of 1 for an *Ethnic CEO* and 0 otherwise. The 10,060 firm-year observations in our sample where RiskMetrics data on CEO gender was available included 176 female CEO-years. The 7,479 observations where RiskMetrics data on CEO ethnicity was available includes 312 ethnic minority CEO-years, 12 of which were ethnic minority female CEOs.

Control variables

Following prior research on determinants of CEO pay, we controlled for various firm-level

determinants of executive pay, including firm profitability, annual equity returns, officer and board ownership, institutional ownership, duality and board independence, board size, firm size, CEO age and tenure, and firm risk (e.g., Core *et al.*, 1999; Mehran, 1995; Tosi *et al.*, 2000). Firm performance was measured by *ROA*, which was operating profit scaled by assets, as well as the annual *Equity returns*. *Officer and board ownership* was the proportion of equity held by directors and officers in the firm, and *Institutional ownership* was the proportion of equity held by individuals who possessed greater than 5 percent of the firm's stock. We measured *Duality* with a binary variable equal to 1 if the CEO were also the chairperson of the board of directors, *Board independence* was measured as the ratio of independent directors on the board, and *Board size* as the number of members on the board. We also controlled for *Firm size*, which was the natural log of a firm's assets, as well as *Firm risk*, which was the standard deviation of monthly stock returns for the last five years. For *CEO tenure*, we used the number of years the individual had been CEO of the focal firm, and we used their age in years for *CEO age*. Lastly, we used an indicator variable for the Sarbanes-Oxley Act (*SOX dummy*) that took a value of 1 for years after 2002 and 0 for years 2002 and before.

ANALYSIS

Table 1 presents descriptive statistics and correlations for study variables, all of which were Winsorized at 1 and 99 percent prior to analyses. In Hypothesis 1, we argued that female and ethnic minority CEOs may be paid less if there is a bias against them due to their minority status, whereas in Hypothesis 3, we argued that the minority status of CEOs may allow for bidding up compensation relative to nonminority CEOs. Table 2 presents the results of the tests of these competing hypotheses. To account for unobservable firm-specific characteristics that might affect pay, we employed firm fixed effects estimation. We tested whether fixed effects estimation was appropriate using two variants of the Hausman (1978) test: the Wu-Hausman and Durbin-Wu-Hausman. Using either of the statistics, we found that using firm fixed effects estimation was more efficient.

Table 1. Descriptive statistics and correlation matrix

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. CEO compensation	7.88	1.07	1.00														
2. CEO job exit	0.13	0.33	-0.06	1.00													
3. Minority CEO	0.04	0.16	0.04	-0.01	1.00												
4. Female CEO	0.02	0.12	0.01	-0.01	0.76	1.00											
5. Ethnic CEO	0.07	0.22	0.07	0.03	0.67	0.03	1.00										
6. Board size	9.05	2.53	0.30	0.03	-0.04	-0.05	-0.01	1.00									
7. Board independence	0.63	0.18	0.19	0.00	0.03	0.00	0.05	0.07	1.00								
8. Officer and board ownership	0.10	0.17	-0.20	-0.02	-0.01	0.01	-0.02	-0.05	-0.35	1.00							
9. Institutional ownership	0.67	0.21	0.22	-0.04	0.03	0.01	0.02	-0.06	0.23	-0.20	1.00						
10. CEO age	55.76	7.53	-0.04	0.18	-0.08	-0.08	-0.03	0.09	-0.03	0.06	-0.04	1.00					
11. CEO tenure	7.21	7.60	-0.11	0.03	-0.04	-0.04	-0.02	-0.08	-0.18	0.22	-0.06	0.41	1.00				
12. Firm size	5,432.46	23,656.26	0.25	0.00	0.00	-0.01	0.01	0.26	0.04	-0.07	-0.03	0.01	-0.04	1.00			
13. ROA	0.11	0.11	0.08	-0.05	-0.03	-0.01	-0.03	0.07	-0.05	-0.03	0.08	0.05	0.05	-0.02	1.00		
14. Equity returns	0.16	0.46	0.09	-0.08	-0.01	-0.01	0.00	-0.04	-0.01	0.02	0.11	-0.02	0.02	-0.02	0.16	1.00	
15. Firm risk	0.44	0.19	-0.08	0.03	0.05	0.03	0.04	-0.40	-0.02	0.05	0.02	-0.20	0.01	-0.12	-0.43	-0.02	1.00
16. SOX dummy	0.36	0.48	0.10	-0.02	0.04	0.03	0.01	-0.07	0.20	-0.05	0.30	-0.03	-0.02	0.03	0.02	0.14	0.13

N = 7,479 firm-year observations in 1,678 unique firms

All the variables are Winsorized at 1 and 99 percent. Correlations with an absolute value of 0.03 or greater are statistically significant at the 95 percent confidence level.

Table 2. The effect of minority, female, and ethnic CEOs on CEO compensation

	1	2	3
Minority CEO	0.23** (3.11)		
Female CEO		0.06* (2.17)	
Ethnic CEO			0.32** (2.89)
Firm size	0.44*** (26.97)	0.54*** (22.72)	0.44*** (26.87)
ROA	0.53** (2.92)	0.84*** (8.50)	0.53** (2.92)
Equity returns	0.01** (2.98)	0.01*** (7.24)	0.01** (2.99)
Firm risk	11.71*** (10.38)	0.35*** (8.44)	11.75*** (10.42)
SOX dummy	0.152*** (7.073)	-0.02 (-0.87)	0.155*** (7.214)
CEO tenure	-0.01** (-3.13)	-0.01** (-3.25)	-0.01** (-3.22)
CEO-chair duality	0.06* (2.32)	0.04† (1.81)	0.06* (2.31)
Officer and board ownership	0.00 (0.20)	-0.25* (-2.57)	0.00 (0.19)
Board size	-0.01 (-0.19)	-0.14* (-2.30)	-0.02 (-0.29)
Board independence	0.36*** (4.62)	0.17* (2.27)	0.35*** (4.49)
Intercept and firm fixed effects	Yes	Yes	Yes
Adjusted R ²	0.45	0.47	0.44

t-statistic in parentheses

N = 7,479 firm-year observations in 1,678 unique firms in columns 1 and 3 and 10,060 firm-year observations in 2,255 unique firms in column 2

†*p* < 0.10; **p* < 0.05; ***p* < 0.01; ****p* < 0.001

Column 1 of Table 2 presents results for minority CEOs. The coefficient on *Minority CEO* is positive and significant (*p* < 0.01), offering support for our third hypothesis but failing to support our first hypothesis. We investigated this relationship further in Columns 2 and 3. In Column 2, the main variable of interest is *Female CEO*, and the coefficient on *Female CEO* is positive and significant (*p* < 0.05). This finding also offers support for the minority status arguments in Hypothesis 3 and rejects the discrimination arguments of Hypothesis 1. In Column 3, we isolated the effect of a CEO's ethnic minority status. The coefficient on *Ethnic CEO* is positive and significant (*p* < 0.01), again providing evidence in support of Hypothesis 3 that CEOs of minority status are paid more and refuting arguments that

discriminatory practices may decrease these individuals' compensation. Thus, the evidence from these analyses indicated that CEOs of minority status, whether considered jointly as minorities or individually by gender and ethnic status, are paid more than the CEOs of majority status (i.e., white males).

We conducted various sensitivity analyses to investigate whether our findings supported our arguments in Hypothesis 3. First, to determine whether our results were robust to estimation method, we used both random and mixed effects estimations and found that our results were robust across these approaches. Additionally, ordinary least squares (OLS) estimation with industry fixed effects and median regressions yielded results similar to our primary analyses, as did estimations using Hoechle's (2007) panel-specific dependent errors, time dummies, and adjusting compensation for inflation using Bureau of Labor Statistics. Second, our sample had only 12 firm-year observations in which the CEO is an ethnic minority female, which limited the statistical power of tests for this subgroup and inhibited further decoupling of the effects of minority status. However, we tested a model including both female CEO and ethnic CEO as well as their interaction and found a nonsignificant coefficient on the interaction (*t* = 0.35). This finding suggests that compensation is not significantly higher for CEOs possessing both female and ethnic minority status and that our findings are robust to this factor. We caution against relying too strongly upon this interpretation, however, given the sample size (see also Zweigenhaft and Domhoff, 2014, for a discussion of the limits to empirical analyses arising from the limited number of minorities in executive ranks).

Third, we assessed whether the CEOs were likely to be viewed as minorities in the context of their firms and thus violated role expectations or would be considered rare. We did so because if minority status CEOs operated in firms more dominated by minority status board members, they might not have violated role expectations or been considered rare. To test whether this possibility affected our results, we matched our data with data on director diversity from RiskMetrics and omitted firms with incomplete data on director diversity, reducing our sample size to 4,482 firm-year observations. Following our measurement of CEO minority status, we computed the diversity ratio of the board based upon the percent of both female and ethnic minority individuals considered both jointly as minorities as well

as independently as females and ethnic minorities. That is, since we operationalized minority CEO in our study by jointly categorizing both female and ethnically diverse individuals as minorities while the female CEO and ethnic CEO measured minority status along gender and ethnic dimensions, we measured the diversity of the board in the same manner. In Table 3, we introduced an interaction term for each of three board diversity measures with the corresponding minority CEO indicator (e.g., female director ratio and female CEO) and repeated our analyses with *CEO Compensation* as the dependent variable. We did not find statistically significant interactions between CEO minority status and the corresponding board diversity variable, suggesting that our results were not being driven by minority CEOs being in firms dominated by minority directors and thus perhaps being unlikely to have violated role expectations or been considered rare. This finding further supports the arguments in Hypothesis 3.

Finally, we manually collected data on the firm-year observations from our sample where CEO ethnicity was blank or listed as “unknown” in RiskMetrics. In the manual collection, two coders used sources such as LexisNexis, MergentOnline, and *The Dun and Bradstreet Reference Book of Corporate Management* (Anderson *et al.*, 2011), and we crosschecked data while verifying discrepancies. We reran analyses using the manually collected data and found results consistent with those we report. As an additional test, we added a dummy variable equal to 1 if data on ethnicity was missing and 0 otherwise, and again found consistent results. Further, we observed no significant association between the missing data dummy variable and either compensation or job exit. Since no systematic differences were observed across the two samples, our results appear robust to the inclusion or exclusion of the manually collected data. Yet, we do wish to note that our manual collection resulted in a higher ratio of ethnic minority CEOs than exists in the sample generated from RiskMetrics, a point we will return to in the discussion.

Overall, our findings for the relationship between CEO minority status and compensation support the minority status hypothesis and not the bias hypothesis. The results indicated that, after controlling for firm and other governance characteristics that may affect compensation, minority status CEOs received more compensation than white male CEOs. Given the average total CEO compensation in our sample

Table 3. The interactive effect of minority CEOs and diverse boards on CEO compensation

	1	2	3
Minority CEO	0.14† (1.75)		
Minority CEO × minority director ratio	0.17 (0.42)		
Female CEO		0.13† (1.65)	
Female CEO × female director ratio		−0.25 (−0.33)	
Ethnic CEO			0.13† (1.89)
Ethnic CEO × ethnic director ratio			−0.76 (−0.69)
Minority director ratio	0.33* (2.09)		
Female director ratio		0.86*** (5.84)	
Ethnic director ratio			0.60** (2.39)
Firm size	0.44*** (17.03)	0.48*** (26.60)	0.46*** (17.46)
ROA	0.11 (0.59)	0.01 (0.06)	0.20 (1.02)
Equity returns	0.01*** (5.38)	0.01*** (6.51)	0.01*** (6.34)
Firm risk	0.38*** (4.758)	0.55*** (5.20)	0.63*** (4.923)
SOX dummy	0.04† (1.78)	0.13*** (5.87)	0.05* (2.15)
CEO tenure	−0.06* (−2.32)	−0.07*** (−3.33)	−0.06* (−2.26)
CEO-chair duality	0.04 (1.45)	0.05* (2.21)	0.04 (1.47)
Officer and board ownership	−0.03† (−1.92)	0.00 (0.27)	−0.03† (−1.85)
Board size	0.04 (0.48)	−0.03 (−0.61)	0.04 (0.49)
Board independence	0.27** (2.42)	0.23** (2.87)	0.29** (2.60)
Intercept and firm fixed effects	Yes	Yes	Yes
Adjusted R^2	0.47	0.45	0.45

t -statistic in parentheses

$N = 4,482$ firm-year observations

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

is \$2.57 million (the natural log of this is 7.85), the coefficient on *Minority CEO* in Model 1 of Table 2 of 0.23 means that a minority CEO receives a 23 percent larger compensation package than a white male CEO, a value worth more than a half million dollars annually. When we compared the coefficients on *Female CEO* and *Ethnic CEO* from Models 2 and 3, we found that women CEOs are

Table 4. The effect of minority CEOs on likelihood CEO job exit

	1	2	3	4
Minority CEO	−0.01 (−0.03)			
Female CEO		−0.16† (−1.70)		−0.17† (−1.71)
Ethnic CEO			0.14* (2.111)	0.12† (1.87)
Firm size	−0.04 (−1.30)	0.05 (1.63)	−0.04 (−1.30)	0.45** (2.68)
ROA	−0.97† (−1.75)	−2.66*** (−4.91)	−0.96† (−1.74)	0.22 (0.39)
Equity returns	−0.01*** (−3.91)	−0.01*** (−4.31)	−0.01*** (−3.91)	−0.01*** (−5.64)
Firm risk	13.19*** (3.55)	0.45* (2.03)	13.18*** (3.54)	10.07** (3.12)
SOX dummy	0.08 (0.80)	0.07 (0.95)	0.08 (0.80)	0.40*** (3.74)
CEO tenure	−0.10*** (−11.94)	−0.11*** (−9.60)	−0.10*** (−11.95)	−0.29*** (−16.59)
CEO age	0.60*** (6.28)	0.66*** (7.64)	0.60*** (6.29)	0.54*** (8.87)
Officer and board ownership	−0.00 (−0.75)	−0.01 (−0.49)	−0.00 (−0.75)	0.00 (0.15)
Board size	0.57*** (3.35)	0.41** (2.77)	0.57*** (3.35)	0.46*** (3.35)
Board independence	−0.57* (−2.44)	−0.71*** (−3.73)	−0.57* (−2.45)	−0.87* (−2.06)
Institutional ownership	−0.57*** (−2.60)	−0.20 (−1.10)	−0.57*** (−2.60)	−0.54** (−2.32)
CEO compensation pay	0.09† (1.77)	−0.03 (−0.56)	0.09† (1.77)	0.16** (2.59)
Pseudo R^2	0.05	0.06	0.05	0.05
Log-likelihood	−2379.75	−2707.731	−2311.55	−2165.82
p -value	0.000	0.000	0.000	0.00

t -statistic in parentheses

$N = 7,479$ firm-year observations in columns 1, 3, and 4 and 10,060 firm-year observations in column 2

Intercepts and industry dummies using two-digit SICs are included in the analyses but omitted from this table.

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

paid 6 percent more than white male CEOs, whereas ethnic minority CEOs are paid 32 percent more than their white male counterparts.

Table 4 displays results for competing hypotheses about the relationship between CEO minority status and job exit. In Hypothesis 2, we suggested that female and ethnic minority CEOs may suffer from biases and thus have a higher likelihood of job exit than white male CEOs. By contrast, in Hypothesis 4, we suggested that female and ethnic minority CEOs have lower likelihood of job exit stemming from their minority status. Since job exit is binary in nature, we used logistic regression, and we clustered standard errors on firm-level indicators using Huber-White sandwich estimators to account

for serial correlation and heteroskedasticity. We controlled for industry fixed effects with dummies for each two-digit SIC. Given that research finds compensation is related to executive job exit (e.g., Messersmith *et al.*, 2011), we controlled for total compensation as well.

The results of our analyses for minority status CEOs present conflicting findings regarding job exit. Specifically, we did not find consistent support for either of our competing hypotheses (i.e., Hypothesis 2 or 4). When assessing *Minority CEO* (which measured minority status as both females and ethnic minorities), we find a statistically nonsignificant relationship with job exit (see Column 1 of Table 4). When we investigate a more

specific categorization of CEO minority status, we found that the effects for *Female CEO* and *Ethnic CEO* on job exit offer conflicting insights regarding Hypotheses 2 and 4. Specifically, in Column 2 of Table 4 we found that *Female CEO* was negatively related to job exit and is significant at the 10 percent level (but not at the 5% level) of analysis, while in Column 3, *Ethnic CEO* is positive and significant ($p < 0.05$). We emphasize that we do not wish to advocate using a 10 percent level of analysis. Rather, we note that *Female CEO* was significant at the 10 percent level of analysis to draw attention to the differences between the effects of *Female CEO* and *Ethnic CEO*. In Column 4 of Table 4, we included both *Female CEO* and *Ethnic CEO* and found that the coefficients for *Female CEO* and *Ethnic CEO* are significantly different ($p < 0.001$).¹

As with our analyses for compensation, we conducted additional tests to assess whether our findings are sensitive to estimation method employed. First, since compensation may affect the likelihood that a CEO remains in the dataset, sample selection bias may affect the relationship between our independent and dependent variables (cf. Heckman, 1976, 1979). We estimated Heckman-style sample selection models and found the same pattern of significance for the independent variables as the results we report. Second, we repeated our analyses using the CEO's total pay divided by the average pay of CEOs in their primary industry rather than just total pay, as well as inflation-adjusted compensation, and found consistent results. We also estimated fixed effects logistic regressions to control for potential firm-specific heterogeneity. Given the presence of firms without CEO exits, fixed effect logistic regression decreased our sample size by about one third, but we found results similar to our primary estimations. Third, we estimated models using dummy variables for year and found consistent results. Finally, we utilized the manually collected data on CEO ethnicity and found results consistent across estimation approaches, although again we note the higher percentage of ethnically diverse CEOs in the manually collected data, a point we address further in the Discussion section. The

sensitivity analyses offered additional support for our findings. Cumulatively, our findings did not offer conclusive support for either the discrimination or resource-based arguments with respect to the job exit of minority CEOs. However, we found evidence that there were differences with respect to the likelihood of job exit for CEOs based upon gender and ethnic minority status, which suggests additional research is needed as to why job exit differs across CEO minority status.

DISCUSSION

In this study, we test competing hypotheses regarding whether female and ethnic minority executives experience inequity in the CEO position or benefit from their minority status. We first hypothesized that since white males have held the CEO position historically, biases associated with the view that a stereotypical CEO is a white male will result in lower compensation and a higher likelihood of job exit for CEOs that are not white males. We next proposed the competing hypotheses based on the notion that since female and ethnic minority CEOs are valuable, rare, and inimitable, they may benefit from their minority status by receiving higher compensation and having a lower likelihood of job exit.

Our analysis of the relationship between CEO minority status and compensation suggests that biases and stereotypes apparent in the form of lower compensation for minorities at positions throughout the organizational hierarchy (e.g., Aydemir and Skuterud, 2008; Castilla, 2008; U.S. Bureau of Labor Statistics, 2007) do not appear to be manifest in lower compensation at the apex of the organizational structure. Rather, we find evidence that CEOs benefit from the value, rarity, and inimitability of their minority status such that they receive higher compensation relative to white males. Our results for minority CEO compensation support economic arguments grounded in the resource-based view that value, rarity, and inimitability play a role in how CEOs are paid (e.g., Carpenter *et al.*, 2001) in that CEOs benefit from their minority status. The findings also challenge the hypothesis that minority CEOs receive lower compensation because of biases and stereotypes associated with minorities in the CEO position. While

¹ Recall that our sample has only 12 firm-year observations for ethnic minority female CEOs. There is only a single firm with an ethnic minority female exiting the CEO position; thus, we cannot conduct a logistic regression in which we include an interaction of Female CEO and Ethnic CEO.

our findings offer consistent support for the relationship between CEO minority status and compensation across gender and ethnic minority status, our findings with respect to the likelihood of job exit do not. Rather, our results suggest that, when considering female and ethnic minority CEOs jointly as a minority status, there is a statistically insignificant difference for the likelihood of job exit between CEOs of minority status and white male CEOs. Yet, when we explore the effects of the two minority statuses independently, we find that in comparison to white male CEOs, female CEOs are less likely to exit the position while ethnic minority CEOs are more likely to do so. Thus, our findings for the CEO minority status job exit relationship fail to provide robust support for either of our competing hypotheses. Cumulatively, the findings of our study have a number of important implications.

First, our results for CEO compensation counter an abundance of evidence indicating that minorities systematically earn less throughout the organizational hierarchy. We view this finding as a positive—that is, our results suggest that publicly traded U.S. companies are willing to pay CEOs based on their value, rarity, and inimitability—but we caution viewing this finding as evidence of a lack of discrimination against minority CEOs. Rather, the fact that minority CEOs are rare suggests that discrimination may still be at work—namely, that systemic biases that limit minority hiring and promotion may be present. Similarly, the adverse stock market reaction to minority executive announcements (Lee and James, 2007; Haslam *et al.*, 2010) as well as other forms of discrimination for minorities in executive roles (e.g., Ding, Murray, and Stuart, 2013; Dixon-Fowler, Ellstrand, and Johnson, 2013; Park and Westphal, 2013) also provide evidence that biases associated with minorities in executive positions still exist.

While we caution interpreting our findings as indicating that discrimination is not present at the level of the CEO, our results do suggest that the level of the organizational hierarchy at which investigations of minority pay gaps are conducted may be an important boundary condition, leading to questions of why these results do not hold for CEOs. A possible explanation may lie in differences between other positions and that of CEO. Unlike other positions, the CEO position is not only extremely visible to individuals inside and outside the firm, but in the context of publicly traded U.S. firms that constitute

our sample, laws require that firms report the compensation paid to CEOs in a clear, concise, and understandable fashion.² Since the CEO position is visible and compensation more easily observable than other positions, firms may consider the possible ramifications from various internal and external stakeholders that arise when firms are perceived as compensating either equitably or inequitably their female or ethnic minority CEO. Thus, firms may consider compensation premiums for female and ethnic minority CEOs as symbolic gestures that generate value for the firm as well (Porac *et al.*, 1999; Wade *et al.*, 1997; Westphal and Zajac, 1994; Zajac and Westphal, 1995). This notion supports the economic contentions that value, rarity, and inimitability of minority status can be beneficial for those possessing minority status in that the result is an ability to extract higher pay regardless of why firms value such payments.

Yet, the same general arguments should hold for likelihood of job exit: as with CEO compensation, job exit of the CEO is highly visible, salient to stakeholders, and easily observable. Thus, firms should wish to treat minority CEOs in a way that prevents their exit from the firm to both send signals that diversity is valued and prevent possible scrutiny associated with a minority CEO leaving the position. We observe this general pattern for female CEOs in our study, but we do not observe this pattern for ethnic minority CEOs. We see two implications from this finding: (1) the outcomes of compensation and job exit, while similar in some respects, may be fundamentally different in such a way that the mechanisms driving the treatment of ethnic minorities differ across these outcomes; and (2) research that groups females and ethnic minorities into a collective class of minorities may be obfuscating more intricate relationships that underlie the effects of minority status. We address each of these implications below.

With respect to whether different mechanisms are driving compensation and job exit for ethnic minority CEOs, while the situations of females and ethnic minorities may be similar in some respects, our results suggest that, for job exit, there are clear differences across female and ethnic minority CEOs. This implies that broader sociological and economic considerations may be at work that would provide insight as to why minorities benefit from

² The Security and Exchange Commission provides disclosure laws online: <http://www.sec.gov/answers/execomp.htm>

their value, rare, and inimitable status in certain instances but not others. We see several possible explanations that merit additional research. The finding that female CEOs appear to be less likely to exit the CEO position may suggest broader sociological factors that make women more inclined to remain in a particular community compared to their male counterparts. As Dahl, Dezso, and Ross (2012: 672) note:

While there is a long-standing debate in sociology and social psychology on whether there really are gender differences in values (Schwartz and Rubel, 2005), there seems to be broad agreement that women are more likely to hold other-regarding values, that is, that they tend to feel more responsible for and attach greater importance to the well-being of others when they make decisions than do men (Beutel and Marini, 1995; Schwartz and Rubel, 2005). Empirical evidence supports this view both in general population samples (Schwartz and Rubel, 2005) and in CEO and director samples.

In the context of our findings, the arguments of Dahl *et al.* imply that the relationship between female CEOs and the likelihood of job exit may be attributable to the fact that women consider the well-being of others such as their employees or children more so than men do. Hence, female CEOs may decide to stay rather than leave the careers of their employees in the hands of another CEO or uproot their family if job exit requires moving out of an area.

Gender-based value differences that lead to different likelihoods of job exit do not explain our finding that ethnic minorities are more likely to exit the CEO position, however. Rather, our finding suggests that ethnic minority CEOs continue to endure intentional or unintentional acts of discrimination that lead to a higher likelihood of job exit. Stainback and Tomaskovic-Devey (2012: 291) offer a possible explanation, noting that, although there is “progress relative to the 1960s when almost all managers were white men,” the treatment of white females has advanced at a greater rate than the treatment of ethnically diverse individuals who advance to similar ranks. Zweigenhaft and Domhoff (2014) mention a similar pattern with respect to the advancement of white females to CEO positions in Fortune 500 companies versus individuals

from other minority status groups. As such, Stainback and Tomaskovic-Devey’s work may suggest the presence of differential workplace dynamics that lead various minority statuses to differ regarding their treatment in the position. Thus, it may be that, while the treatment of white female CEOs has advanced to the point that women feel comfortable and hence are more likely to stay, the treatment of ethnic minorities has not advanced at a commensurate rate, and hence ethnic minorities are more inclined to exit.

Similarly, it is possible that the role that ethnic minority CEOs play in breaking through the glass ceiling makes them particularly susceptible to both personal and interpersonal social penalties (Rudman, 1998; Rudman and Fairchild, 2004). For example, Rudman *et al.* (2012) summarize a wealth of literature on vanguards, or atypical role models, noting how vanguards carry a burden associated with being atypical in a position and thus experience higher burnout and attrition. Their review notes that vanguards often endure intentional prejudice but also that unintentional actions and vanguards’ self-placed pressures may have powerful impacts on the vanguard. The review also points out that researchers classify both female and ethnic minority CEOs as vanguards and, as such, does not fully explain the differences we observe across minority status for job exit. Future research may benefit from incorporating insights from the value differences lens taken by Dahl and colleagues (2012), the more sociological lens of workplace dynamics from Stainback and Tomaskovic-Devey (2012), and the vanguards lens summarized by Rudman and colleagues (2012). Similarly, research can build on multiple views to understand ways that ethnic minority and female executives have different workplace dynamics and vanguard experiences that drive subsequent exit differently.

A closely related issue to whether different mechanisms are at work for different groups of minority status CEOs that stems from our research is that researchers should caution grouping minorities into collective classes in empirical analyses, as these broad classifications may be obfuscating more intricate relationships that underlie the effects of different minority statuses. Although there may be theoretical reasons indicating that female and ethnically diverse individuals will have similar experiences, our findings suggest that these assumptions do not always hold. Thus, empirical analyses may add robustness by analyzing different minority

statuses individually. Such an approach will also be of benefit to develop theory and subsequent practice as well, although the relative rarity of minorities in executive positions still poses problems for statistical analyses.

While our study offers significant contributions to the literature, future research can also address the limitations of our study, which in turn pose avenues for further advancing this line of inquiry. In particular, our study looked only at large, publicly traded companies in the United States. The firms in our sample, as well as their CEOs, are likely to receive more coverage from the media and have high visibility (Daily *et al.*, 1999; Dixon-Fowler *et al.*, 2013; Lee and James, 2007). Further, the size and public nature of these firms may lead them to be particularly proactive in desiring to be viewed as being on the forefront of social initiatives such as equitable compensation (King, 2008; McDonnell and King, 2013). Although our analyses control for size, it would be interesting to extend these analyses to private companies. Similarly, given the nation-level institutional differences with respect to CEOs (Crossland and Hambrick, 2007, 2011) and their dismissal (Crossland and Chen, 2013), future researchers could investigate the role that such differences play in acting as boundary conditions with respect to the compensation and likelihood of job exit of minority CEOs. Extending the findings of this study to other executive-related outcomes would be insightful as well. Such research could add insight to theories on compensation (e.g., how firms settle up; Wowak *et al.*, 2011) and the resource-based perspective with respect to bargaining and payments for resources (Lippman and Rumelt, 2003a, 2003b), while also addressing our lack of understanding of minority status on the board (Johnson, Schnatterly, and Hill, 2013).

Another avenue for future investigation is to investigate differences between firms where data on CEO minority status is missing or unknown in RiskMetrics. Although we crosschecked data across two coders and conducted analyses to ensure that findings were robust across the manually collected data, recall that we found a higher ratio of ethnic minority CEOs in the manually collected data used in our sensitivity analyses. The higher ratio we observed may indicate that ethnic minority CEOs may not have been as rare for the companies with missing data on CEO ethnicity in RiskMetrics or that these companies hired minorities at greater rates. While scholars note that there is no set threshold level

that indicates a resource is rare since the degree to which a resource is considered rare is context dependent (Barney and Wright, 1998; Lippman and Rumelt, 2003a, 2003b), future research could build upon our findings by attempting to determine at what point minority status is no longer considered rare. Future research could also extend our findings by investigating why firms may be more likely to hire ethnically diverse CEOs. Relatedly, manual collection of such an extensive portion of data likely led to inaccuracies. Although we avoid these confounds associated with manual collection by using only data drawn from RiskMetrics in primary analyses, the veracity of our robustness tests should be considered in light of this limitation. Our longitudinal design and utilization of archival data also did not permit investigations of behaviors of CEOs or organizational climate factors that may affect outcomes such as compensation and retention. Yet, scholars suggest that behaviors such as influence tactics (Watkins, Smith, and Aquino, 2013) and authentic attention to diversity (Smith *et al.*, 2012) have important implications that open avenues for extending our study. Of particular note is Smith and colleagues' (2013) untested argument that females who use communal tactics will be more effective than those who use agentic tactics.

A final line of inquiry that can advance our understanding is to investigate further the question that if boards view minority CEOs as valuable, why is it that we do not see more of these individuals atop organizational hierarchies. A number of studies articulate the obstacles to advancement and retention of minorities, including stereotypes associated with executive positions (Dreher *et al.*, 2011; Heilman *et al.*, 1989; Lee and James, 2007) as well as inequities in both evaluation (Kerr, Miller, and Reid, 2008; Yap and Konrad, 2009) and treatment from colleagues (Goldman *et al.*, 2008; Hom *et al.*, 2008). Collectively, scholars note that obstacles to advancement and retention result in higher rates of exit for individuals of minority status in comparison to white males (McGinn and Milkman, 2013). Further, many individuals of minority status have the capabilities to advance, but in light of the obstacles and possible inequities, may choose not to pursue advancement opportunities (Altonji and Blank, 1999; Blau and Devaro, 2007; Rudman *et al.*, 2012). Thus, executives of minority status remain rare, and despite boards viewing minority status candidates as valuable (Broome *et al.*, 2011; Krawiec *et al.*, 2013), obstacles that continue to limit

supply may inhibit hiring female and ethnic minority CEOs.

In conclusion, our study presented competing hypotheses with respect to the effect of minority status on compensation and job exit at the CEO level. Specifically, we asked whether female and ethnic minority CEOs endured inequity or benefit with respect to their compensation and likelihood of job exit. Our findings suggest that both female and ethnic minority CEOs seemed to benefit from their minority status in the form of higher compensation but that ethnic minorities endured inequity that increases their likelihood of job exit. These findings suggest that more research is necessary to understand possible moderating factors that determine the degree to which discrimination for minorities that prevails at lower levels of the organizational hierarchy is manifest as well as the processes underlying differential treatment for female and ethnic minorities leading to certain outcomes and not to others.

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