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CEO gender differences in careers and the moderating role of country culture: A meta-analytic investigation

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ABSTRACT

How and under what conditions do female and male CEOs' careers differ? The field lacks a clear answer to this question, as extant research has produced mixed findings, many of which also vary across countries. In response, we examine individual- (e.g., personal career success, such as CEO pay) and firm-level (e.g., firm performance) differences in female and male CEOs' careers, and also how these differences vary across countries with different cultural attributes (specifically uncertainty avoidance and gender egalitarianism). To develop our theoretical explanation, we draw on recent scholarship that has used the well-known demand-supply framework from economics to synthesize extant theory on career differences between women and men. Then, we test our theoretical model with meta-analytic results based on 158 studies in which differences between female and male CEOs, in the firms they lead, and in the outcomes they receive and produce, were examined. Our findings reveal that, compared to male CEOs, female CEOs had more human capital yet led less prestigious firms. Likewise, female CEOs received less favorable personal career success outcomes, and their firms had worse market-based performance despite similar levels of accounting-based performance. In addition, the country culture variables played important roles in moderating many of the career differences. The results of our research enrich understanding of career differences between female and male CEOs and cultural attributes that moderate such differences, suggest the importance of taking into account both demand-side and supply-side perspectives, and offer ample implications for theory, future research, and practice.

1. Introduction

Chief executive officers (CEOs) are the most visible, highly compensated, and influential individuals in organizations. As a result, the literature on CEOs' careers is large and important, with some studies focused on explaining individual-level differences in CEOs' careers (e.g., CEO pay) (e.g., Tosi, Werner, Katz, & Gomez-Mejia, 2000), others focused on firm-level differences (e.g., firm risk taking) (e.g., Wang, Holmes, Oh, & Zhu, 2016), and still others focused on cross-country differences in CEOs' careers (e.g., Crossland & Hambrick, 2007, 2011). The extreme underrepresentation of female CEOs is a significant issue in this literature and has attracted attention not only from academics, but also from practitioners, media, and regulators. For example, only 5.4% of Fortune 500 companies had female CEOs in 2017. Strikingly, this percentage is a record high in the U.S. (Pew Research Center, 2017), and there is evidence that the percentage is even lower worldwide (Ibarra & Hansen, 2010). In turn, a large and growing literature has investigated individual-level, firm-level, and cross-country differences in female and male CEOs' careers. This research is important, as it informs theory about the complex impact of gender on individuals, firms, and society. It also has important practical implications for equal opportunity efforts to address the gender imbalance in CEOs.

Despite its importance, the literature on career differences between female and male CEOs has two critical shortcomings. First, much of the evidence is mixed, leaving equivocal support for various theoretical arguments about the impact of gender on individual- and firm-level differences in CEOs' careers. At the individual level, for example, whereas Becker-Blease, Elkinawy, and Stater (2010) found that female executives were more likely to exit their firms, Hill, Upadhyay, and Beekun's (2015) found that female CEOs were less likely to exit their firms.[1] Similarly, at

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[1] Hill et al. (2015) did not differentiate voluntary and involuntary exit, but both can indicate discrimination. Dissatisfaction due to discrimination can produce voluntary exit, and outright prejudice can produce involuntary exit. Relatedly, Becker-Blease et al. (2010) found that females were more likely to exit executive positions both voluntarily and involuntarily.

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the firm level, glass cliff theory posits that gender role stereotypes relegate female CEOs to less prestigious firms that already are more likely to fail. However, whereas some research shows that previously poorly performing firms are more likely to hire female CEOs (Ryan & Haslam, 2005), other research shows little evidence of this effect (and some evidence of the reverse) (Adams, Gupta, & Leeth, 2009). Such discrepancies not only cloud our understanding of career differences between female and male CEOs, but also lead to contradictory implications for theory, executives, policy makers, and other stakeholders.

Second, and relatedly, we have little knowledge about boundary conditions that shape career differences between female and male CEOs. In particular, mixed findings across countries suggest that external contingencies might influence the career differences that exist. For instance, whereas research suggests that female CEOs are paid less than male CEOs in China (Lam, McGuinness, & Vieito, 2013), most evidence suggests that they are paid at least as well as male CEOs in the U.S. (Bugeja, Matolcsy, & Spiropoulos, 2012; Mohan, 2014). Similarly, although studies in both China and the U.S. have shown that firms with female CEOs take less risk than male CEOs (Khan & Vieito, 2013; Zeng & Wang, 2015), female CEOs are associated with more stock return volatility in China (Farag & Mallin, in press) but less stock return volatility in the U.S. (Martin, Nishikawa, & Williams, 2009). Thus, investors in the two countries appear to hold different views about the suitability of, and uncertainty created by, female CEOs. These inconsistent findings are important to understand, because they suggest that different country contexts are likely to shape the differences between female and male CEOs in important ways.

Thus, to reconcile mixed findings and establish boundary conditions, we conduct a meta-analysis of the literature on career differences between female and male CEOs. The overarching research question is as follows: *how and under what conditions do female and male CEOs' careers differ?* To answer this research question systematically and to identify career constructs and potential boundary conditions theoretically, we draw from abundant scholarship that has adapted the well-known demand-supply paradigm from economics to synthesize extant theory about career differences across genders into a single framework (e.g., Brands & Fernandez-Mateo, 2017; Ding, Murray, & Stuart, 2013; Fernandez-Mateo & Fernandez, 2016; Gabaldon, Anca, Mateos de Cabo, & Gimeno, 2016). Put simply, this framework suggests that there are differences in the demand for, and also in the supply of, female versus male CEOs, and that these differences have important consequences for female and male CEOs' careers. *Demand-side forces* refer to factors, such as gender role stereotypes, which *reduce firms' willingness to hire and support female CEOs*. By contrast, *supply-side forces* refer to factors, such as family demands, that *shape women's experiences and preferences and, in turn, their career choices and behaviors*. Thus, the demand-supply framework identifies the different types of career obstacles that female CEOs face and that, in turn, produce career differences between female and male CEOs. In this way, the framework links together different theoretical arguments and has the potential to offer a more balanced and comprehensive view than does any single theory.

Using this demand-supply framework, we identify several critical and heavily-studied differences between female and male CEOs, in the firms that hire them, and in the outcomes that accrue to both the CEOs themselves and to their firms. Specifically, reflecting prior literature on female and male CEOs' careers (e.g., Fitzsimmons & Callan, 2016a), we focus on *CEO human capital* (i.e., knowledge, skills, abilities, and other intellectual and psychological characteristics that contribute to organizational goals; Ployhart & Moliterno, 2011) and *firm prestige* and predict that because of the demand-side and supply-side career obstacles they face, female CEOs (1) must have more human capital to become CEOs and yet (2) will lead less prestigous firms. Similarly, these same demand-side and supply-side forces tend to limit the personal and organizational career outcomes that female CEOs achieve. Thus, again echoing prior literature (Hill et al., 2015; Lee & James, 2007; Martin et al., 2009), we focus on *personal career success*, *firm risk taking*, and *firm performance* and predict that, reflecting the demand-side and supply-side career obstacles they face, female CEOs (3) achieve lower personal career success, as evidenced by CEO pay and other objective indicators and also lead firms (4) that take less risk and (5) achieve lower firm performance.

Finally, as noted, these career differences also vary across countries (e.g., Blau & Kahn, 2007; Hausmann, Tyson, & Zahidi, 2012). Such cross-country differences are important to understand, because CEOs' careers unfold within broader sociocultural contexts that shape not only societal expectations about the competencies and appropriate behaviors of women and men, but also the level of uncertainty and discomfort created when women and men violate cultural norms (e.g., Block, 1973; Wood & Eagly, 2002). By extension, it stands to reason that career differences between female and male CEOs are culturally contingent. Specifically, research suggests that two cultural variables, uncertainty avoidance and gender egalitarianism, shape the demand for and supply of female CEOs and, thus, may be particularly important moderators of career differences between female and male CEOs (e.g., House, Hanges, Javidan, Dorfman, & Gupta, 2004; Kossek, Su, & Wu, 2017; Parboteeah, Hoegl, & Cullen, 2008). Uncertainty avoidance and gender egalitarianism are critical for understanding CEO gender because appointing female CEOs tends to challenge societal expectations about gender, specifically the appropriateness of women in leadership, thus creating a source of uncertainty that is not present when the CEO is male, which in turn shapes not only the demand for female CEOs, but also social structures that affect the supply of female CEOs. In addition, cultural norms and practices about gender parity impact stakeholders' willingness to hire and support female leaders and also the career opportunities that females believe are available to them, further shaping the demand for and supply of female CEOs. Consistent with these views, scholars have shown that uncertainty avoidance (Emmerik, Wendt, & Euwema, 2010) and gender egalitarianism (Toh & Leonardelli, 2012) are critical to the emergence and development of female leaders in a country, with uncertainty avoidance inhibiting and gender egalitarianism enabling female leaders' careers (Parboteeah et al., 2008).

Together, these predictions lead to the theoretical model in Fig. 1. As the figure suggests, two of the focal constructs—CEO human capital and firm prestige—are treated as antecedents to firms' decisions to hire female versus male CEOs. The other three—CEO personal career success, firm risk taking, and firm performance—are treated as results of this decision. Thus, in a nutshell, the model examines factors that shape decisions to hire female CEOs, the consequences of these decisions, and how these effects vary across countries.

We test our hypotheses using meta-analytic results based on 158 primary studies that sampled firms from 32 countries. Meta-analysis is particularly pertinent for reconciling the disparate findings to reveal true career differences between female and male CEOs. In addition, it is well-suited for detecting moderating effects of some study features, such as the culture of sampled countries, that are difficult to test in a single primary study (Post & Byron, 2015; Schmidt & Hunter, 2014). As an added benefit, we also can test the moderating effects of certain study characteristics, including for example, cross-sectional versus longitudinal research designs.

In summary, this study sheds light on *how* and *under what conditions* CEO gender shapes CEOs' careers. In doing so, it makes three important contributions. First, the meta-analysis reconciles mixed evidence on career differences between female and male CEOs and, in turn, provides a platform for further theory development on CEO gender and its implications. In this way, our study extends research on gender differences that has focused mostly on the careers of employees as a whole (e.g., Ng, Eby, Sorensen, & Feldman, 2005), leaders in general (e.g., Koenig, Eagly, Mitchell, & Ristikari, 2011), and boards (e.g., Post & Byron, 2015). This meta-analysis is needed, due to the importance of CEOs and the inconsistencies in prior research.

Second, the meta-analysis enriches theory by revealing important boundary conditions. In particular, it shows how the broader cultural