



GENDER-INCLUSIVE GATEKEEPING: HOW (MOSTLY MALE) PREDECESSORS INFLUENCE THE SUCCESS OF FEMALE CEOS

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Gender-inclusive Gatekeeping: How (Mostly Male) Predecessors Influence the Success of Female CEOs

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ABSTRACT

Male-typed leadership schemas have been widely acknowledged as barriers to women's success in leadership roles. We explore how local organizational agents and contexts enable women leaders to overcome these barriers and achieve success at the highest levels in firms. In particular, we focused on CEO succession events and studied how several facets of predecessor CEOs and the succession context combine to influence incoming women's post-succession performance. To do so, we conducted a qualitative comparative case study of all CEO successions that involved female successors between 1989 and 2009 across the largest corporations in the United States. Our findings suggest that women's success occurred when a confluence of local firm-level factors and attributes of the (mostly) male predecessors promoted gender-inclusive gatekeeping during succession. Our QCA approach revealed three recipes for female success: handing over the legacy, partnering the legacy, and turning around the legacy. Moreover, a comparison to a matched-sample of men CEO succession events showed that these three recipes for success are unique to women. Based upon our findings, we propose that male predecessors' gender-inclusive gatekeeping facilitates female leaders' success and occurs when local enabling conditions and the embedded context enact agentic and structural mechanisms to alter leadership schemas.

Across the largest corporations in the United States, over the past two decades, just under a hundred women have been appointed to the position of CEO. Given the historic underrepresentation of women in top leadership roles, it is perhaps not surprising that management research has been devoted to identifying the obstacles that women face as they make their way into the upper echelons. Previous research in this domain has put forth three interrelated arguments: women face barriers because they are numerically underrepresented (Kanter, 1977); women are likely to fail in CEO roles because they do not fit the stereotypic expectations of what it means to be an effective leader (Eagly & Karau, 2002; Zhang & Qu, 2016); and, women tend to be appointed to leadership positions in the worst of times, which sets them up for failure (e.g., the "glass cliff"; Haslam & Ryan, 2008;Ryan & Haslam, 2005). The major theme across all of these

perspectives is that gender biases, stereotypes and male-typed leadership schemas shape global normative expectations about women's ability to lead and undermine the success of women in leadership roles. Based on this underlying theory, studies so far have largely focused on perceptions of women leaders and provided evidence that incoming women CEOs experience negative reactions from investors, media and other external stakeholders (Dezso & Ross, 2012; Dixon-Fowler, Ellstrand, & Johnson, 2013; Lee & James, 2007; Park & Westphal, 2013). However, whether or not firms led by women underperform is not at all clear. Indeed, research has yielded mixed results for the effect of CEO gender on firm performance (e.g., Davis, Babakus, Englis & Pett, 2010; Hoobler, Masterson, Nkomo & Michel, 2016; Khan & Vieito, 2013; Kolev, 2012; Zhang & Qu, 2016; Jeong & Harrison, 2016).

In a substantive departure from the past accounts of women's performance in executive roles, we focus on the potential role that key organizational agents and local contexts may play in driving variability in the application of gender biases and stereotypes that can hinder women's success as leaders. The prevailing emphasis in past research has been on organizational stakeholders' negative responses to female leaders emanating from pervasive male-typed schemas of leadership; a perspective which presumes that such schemas uniformly harm women and uniformly benefit men. This past lens therefore implicitly lends itself to a focus on differences *between* men and women in leadership effectiveness and deflects scholarly attention away from examining the factors that create variability *among* women who occupy executive positions in firms. Indeed, as is reflected in the mixed findings in this domain, it is not yet fully understood why and how some female leaders are able to overcome male-typed leadership schemas

to become successful as CEOs, while others fail to do so. This has led some scholars to recommend that, if actionable theories of gender integration are to be developed, researchers must refrain from taking a "sex differences" approach and focus instead on identifying the structural and contextual factors that shape variability within each gender (e.g., Ely & Padavic, 2007). To this end, we integrate past theory and research on female leadership, gatekeeping, and executive successions to examine conditions under which predecessor CEOs—who in the upper echelons of firms are mostly male—may function as "gatekeepers" and whether this gatekeeping has potentially beneficial or pernicious effects on the performance of female CEO successors.

We consider two ways in which male predecessor CEOs may shape success amongst female CEOs. First, we consider the gatekeeping role played by the predecessor CEOs through their involvement in hiring, selecting and socializing incoming female executives. The predecessor CEO's impact is particularly potentially prominent in the context of succession events – a sensitive period for the CEO role – where a legacy built by one organizational leader is bequeathed to the next (Higgins, 2005; Joshi, Dencker, Franz, & Martocchio, 2010; Marquis & Tilscik, 2013). The executive succession literature suggests that whether predecessors are supportive or meddlesome, inconspicuous or charismatic, they have a huge influence on how successors are hired and groomed for the CEO position (e.g., Zajac & Westphal, 1996) and oftentimes remain involved in firm governance to directly influence the successors' subsequent success in the role (Chen & Hambrick, 2012; Quigley & Hambrick, 2012). Furthermore, research on women's entry into traditionally male-dominated contexts such as academia, engineering, law, science, and supervisory ranks is instructive for understanding the predecessor's

potential gatekeeping role. Gatekeepers have been traditionally defined as individuals (e.g. supervisors) or groups (e.g., professional associations or boards) who restrict (or enable) entry into highly prestigious occupations through their direct involvement in recruitment or the setting of occupational standards and norms (Merton, 1957). Past research suggests that male gatekeepers influence the maintenance, reproduction, or mitigation of gendered expectations and hierarchies and can potentially hinder or enhance gender parity in male-dominated settings: while some male gatekeepers may be exclusionary and withhold resources from incoming women, others may be inclusionary and facilitate women's success by opening avenues for gender integration (Acker, 1992; Briscoe & Joshi, 2016; Connell, 2005; Reskin & Padavic, 1988).

Second, we posit that gatekeeping also occurs through the setting and managing of the local normative expectations associated with the particular CEO role. These local expectations can either mitigate or exacerbate the effects of global male-typed schema about women's ability to lead a firm and in this way influence the success or failure of their female successors. Past research shows that predecessors are integral in such a process as they may be highly influential in shaping idiosyncratic firm-specific skill expectations associated with the executive role that the successor must live up to in order to be successful (Burton & Beckman, 2007). Prior research on inter-generational transfer of legacies (e.g., Joshi et al., 2010; Wade-Benzoni, 2002) also highlights the role that predecessors play in shaping the resource-based benefits or burdens associated with leader positions and how these have implications for the performance of incumbents in their new roles (Wade-Benzoni et al., 2008). Although these "local" expectations have

typically been viewed as constraints on successors, we consider whether they might also alter the stereotypic role expectations driven by global male-typed schema of leadership.

We draw on these disparate streams of research to propose that predecessors and the local context in which they are embedded are an important missing link in extant theorizing about women's successes and failures in CEO roles. We explore the predecessors' influence in female CEO's success through a comparative case analysis of all of the CEO successions that involved female successors between 1989 through 2009 across the largest firms in the United States. Although the appointment of women as CEOs in large public corporations remains a relatively rare event, a small yet critical mass of women has ascended to this highest level of firms over the past couple of decades. This provides a unique opportunity to begin to develop theory that accounts for women's successes in top leadership roles. To do so, we used the qualitative comparative analysis (QCA; Ragin, 2000; 2008) case study approach to systematically examine the entire set of female CEO cases—our final sample consists of 84 female succession events—and to build theory based upon the underlying cases (e.g., Greckhamer, Misangyi, & Fiss, 2013).

As is conventional in case study research using QCA, we start by drawing on existing theory to identify various attributes of the predecessor CEO and the succession context that seem relevant for shaping the success or failure of incoming women CEOs. Like prior research on female executives, we begin with the premise that all female CEOs are subject to global normative male-typed expectations about leadership, but we surmise that variability in the post-succession performance among women CEOs can be in part attributed to the more proximal influence of certain predecessors operating in conjunction

with other key attributes of the succession context (Finkelstein, Hambrick, & Cannella, 2009; Marquis & Tilscik, 2013). Our qualitative comparative case study reveals that a complex confluence of predecessor attributes and local contextual conditions combined to form three gender-inclusive gatekeeping recipes through which predecessors facilitated the success of women CEOs in these organizational settings. Based upon our findings, we offer a midrange theory of gender-inclusive gatekeeping for women's effectiveness in the upper echelons, and we discuss the implications of our theory for future research on women's transition into leadership roles more generally.

Women in Executive Roles: Theory and Evidence

The predominant theme in extant research on women in executive roles is that pervasive male-typed leadership schemas or stereotypes create barriers for women's success as leaders (e.g., Eagly & Karau, 2002; Schein, 1977). This view largely rests on role congruity theory (Eagly, Wood, & Diekman, 2000) and suggests that leadership roles implicitly invoke stereotypically male traits —such as competitiveness, aggressiveness, independence, forcefulness and decisiveness. Given women's gender-based social roles, they are stereotypically considered to possess communal and nurturing qualities like cooperativeness, compassion, thoughtfulness and warmth, that are believed to be more apt for caretaking roles rather than leadership roles that require dominance (Eagly & Karau, 2002). This incongruence between female stereotypes and the male-typed traits associated with leaders leads to perceptions that women are ill-equipped for leadership roles and results in less favorable and even antagonistic evaluations of women's leadership effectiveness (Eagly & Karau, 2002; Koenig, Eagly, Mitchell, & Ristikari, 2011; Joshi, 2014; Nelson & Quick, 1985). Schein's (2007) 'think manager-think male'

paradigm adds to this perspective, highlighting how traditional stereotypes of leaders involve agentic characteristics that tend to be associated with men (Schein 1973, 2007). In short, this past research suggests that male-typed schema guide assessments of the characteristics required for success in managerial roles, thereby fostering bias against women in managerial selection, placement, promotion, and training.

Broad support for this perspective has come from studies that have examined organizational stakeholders' perceptions of women's ability to perform (e.g., Dixon-Fowler et al., 2013; Lee & James, 2007; Park & Westphal, 2013). For example, announcements of female CEO appointments receive negative reactions from shareholders (Lee & James, 2007), as well as have negative spillover effects to other firms with female CEOs (Dixon-Fowler et al., 2013). And, media coverage on women CEOs is far more likely to prime gender roles by alluding to the executive's children and marital status, ultimately portraying female CEOs based on gendered norms rather than as viable leaders (Lee & James, 2007). There is also evidence to suggest that CEOs at other firms are more likely to attribute low performance to a peer CEO (i.e., rather than to environmental factors) when the peer is a female rather than a male. This triggers further negative media coverage for female-led firms and harms the reputations of women CEOs (Park & Westphal, 2013). Moreover, there is some evidence to suggest that when failure occurs, women are more likely to be singled out than are men for criticism and blame (Haslam, Ryan, Kulich, Trojanowski & Atkins, 2010). A related stream of research suggests that women are likely to be appointed to leadership roles in times of crisis and that their appointments are thus 'more precarious' and set up for failure (also known as the 'glass cliff' phenomenon; Ryan, Haslam, Hersby, & Bongiorno, 2011; Ryan &

Haslam, 2007). However, research evidence testing this 'glass cliff' perspective has been mixed (e.g., Paustian-Underdahl, Walker & Woehr, 2014; Rosette & Tost, 2010).

Whether these perceptions and resulting disadvantages affect women CEOs' actual successes—e.g., post-succession firm performance—remains unclear. While some studies have found marginal performance benefits for firms with female CEOs (Davis et al., 2010; Khan & Vieito, 2013), others have found no significant difference in the shareholder returns of firms led by male versus female CEOs (Koley, 2012). These equivocal findings have prompted researchers to look for contingencies that may shape the effects of CEO sex on firm performance. In a recent study set in the context of publicly-traded Chinese firms, Zhang and Qu (2016) found support for their suggestions that "gender-change" among CEOs (i.e., a woman succeeding a man) would have a "disruptive" effect on post-succession firm performance because this gender change makes the female successor's perceived "out-group status" especially salient. Moreover, they found that the successor's insider origin and the presence of other women on the board of directors lessened this negative effect, which they suggested is due to these conditions reducing "the salience of the female successor's 'out-group' status based upon gender" (2016: 1850).

Although these latter findings offer an important initial insight into how factors of the succession context may play in shaping women's performance outcomes in CEO roles, they do not go far enough in engaging the complexities of successions wherein attributes of both the predecessors and successor combine with the succession context to influence success (Karaevli & Zajac, 2013). Indeed, past research suggests that succession events represent a transitory period in which elements of the past—the historic

legacy associated with the role and the past experiences of the successor (Burton & Beckman, 2007)—as well as the present—the succession context and the involvement of the predecessor in and after the transition (Quigley & Hambrick, 2012; Zajac & Westphal, 2004)—jointly operate in complex ways to shape subsequent performance in the role (Finkelstein et al., 2009; Marquis & Tilscik, 2013).

The Influence of Predecessors and the Succession Context

Our thesis is that certain attributes of the predecessor combine with several key facets of the succession context to facilitate inclusionary (exclusionary) gatekeeping that might mitigate (amplify) the broader gendered stereotypical expectations for leadership roles. We first consider three key predecessor attributes that may contribute to predecessors' influence on the subsequent performance of the incoming female successors.

The Predecessor's Founding Status and Tenure

The predecessor CEO's status as a founder or a member of the founding family is likely to have considerable influence on stakeholder's expectations about the role—and hence on the success of the incoming successor—primarily because founders created the role to begin with. Indeed, Burton and Beckman (2007) found that the backgrounds, skills and expertise of founding executives left a lasting "blueprint" for future incumbents in that role: the extent to which successors fit the expectations set by this blueprint predicted their own longevity in the role. Apart from shaping expectations about the skills and expertise associated with the role, founding CEOs may have more direct involvement in the incoming CEOs' selection and socialization. In their review of organizationally-based generations, Joshi and colleagues highlighted how idiosyncratic skills developed in a role

over a period of time form a part of a unique role-based generational legacy which has long term implications for the performance of future incumbents (Joshi et al., 2010; Joshi, Dencker & Franz, 2011). Therefore, even when the predecessor is not a founder, a long tenure in the role would also lead to a specific legacy or blueprint for the expertise and skills needed in the role itself that may set local normative expectations that must be met by the successor in order to be successful (see also Marquis & Tilscik, 2013). To the extent that a longer tenure in the role allows the CEO to build social relationships with key stakeholders, it also affords the predecessor the ability and legitimacy to manage stakeholder expectations about the incoming CEO. Moreover, based on the gravitas conferred by their long experience in the role, long tenured predecessor CEOs are also likely to be directly engaged in the incoming executives' selection and socialization. As such, founder status and/or a long tenure would make the predecessor uniquely positioned to affect global schemas or stereotypic expectations about the local leader role.

These perspectives suggest that founding status/tenure is likely to enhance the male predecessors' gatekeeping function during succession events involving female successors in two ways: by enhancing the potential for the predecessors direct involvement in selection and socialization of female successors and by indirectly forging local expectations for the skills needed in the role. However, since past gatekeeping research has not focused on the specific context of executive successions, *how* the predecessor's founding status/tenure will affect a female CEO's subsequent success is unclear. On the one hand, this literature suggests that to the extent that CEOs who are long tenured or founders, they may be in a position to buffer the incoming executive from global stereotypic expectations of the CEO role and also be a source of mentoring and

socialization in the role. On the other hand, we might expect that since predecessor CEOs are mostly male, tenure or founding status might confer a "larger than life" persona for the departing male executive that simply mirrors or further strengthens societal male-typed implicit leadership schemas highlighting the female successors' atypicality in the new role.

The Predecessor's Pre-Succession Power

The power enjoyed by the predecessor CEO prior to succession, a key attribute to be considered in any consideration of succession events (e.g., Finkelstein et al., 2009), stands as a second potentially critical influence on the successor female CEO. In particular, CEO duality—i.e., when the CEO is also the chair of the board of directors stands as an unambiguous marker of the CEO's power and leadership (e.g., see Finkelstein & D'Aveni, 1994). Powerful predecessor CEOs are likely to have a direct say in the hiring or selection of the incoming female prior to the succession (e.g., Zajac & Westphal, 1996). Further, like founding CEOs, powerful CEOs may also be in a position to forge a blueprint on the role itself that might serve as the standard based upon which the incoming CEO is evaluated (cf., Burton & Beckman, 2007). Indeed, it seems reasonable to expect that the predecessor's duality (or lack thereof) might itself be part of that blueprint, such that the incoming executive's duality (or lack thereof) might serve as a signal of their fit with the role. While the predecessor's power is clearly a crucial attribute to be considered in developing an understanding of female success, it is unclear whether it will magnify or alter global normative expectations of women's ability to succeed as the CEO. On the one hand, a powerful predecessor CEO can serve as a beneficial gatekeeper, if for instance he uses it to provide potential female successors

access to the technical skills and social capital requisite to the job. On the other hand, if the male predecessor's power triggers male-typed schema, or allows him to withhold access to technical and social resources from the incoming executive, this might have pernicious effects for the female successor's performance.

The Predecessor's Post-Succession Presence on the Board

The CEO succession literature further highlights that predecessors can also directly influence their successors after the succession event (e.g., Fredrickson, Hambrick, & Baumrin, 1988; Quigley & Hambrick, 2012). For instance, Quigley and Hambrick (2012) found that predecessor CEOs may linger on as a member of the board of directors, often as the chairman of the board of directors, and that this presence can limit the successor CEO's ability to make strategic changes and impact firm performance. Whether this continued presence has a beneficial or detrimental effect on the female CEO's subsequent performance is unclear, however, as it also hinges on the way in which the predecessor serves as a gatekeeper. For instance, by remaining active on the board, a predecessor who is committed to gender diversity and inclusion at the highest levels may continue to provide access to social capital and other resources that are crucial for meeting the local normative expectations associated with the CEO role. On the other hand, this lingering presence could also serve as an active meddlesome influence that severely hinders the female successor's legitimacy and ability to act in the role.

In sum, whether these three attributes of a predecessor's influence—which may combine in several ways to involve active engagement pre- and post-succession as well as set expectations associated with the role—have a detrimental or beneficial impact on the female successors' fate remains an open question. We now turn to considering several

aspects of the succession context which may combine with the predecessor influences to shape post-performance success.

The Successor and Succession Context

The CEO succession literature points to several key facets of the succession context—the female successor's origin, the inherited performance, and the power of the successor—that may potentially combine with the predecessor's attributes in setting local expectations that either mirror or buffer global male stereotypic expectations about the CEO role as well as affect the agency of the successor (e.g., Finkelstein et al., 2009; Karaevli and Zajac, 2013).

Successor origin. The origin of the female successor—whether the incoming female CEO was promoted from inside (insider) or hired from outside (outsider) the firm—is widely acknowledged by extant research as a key facet of executive successions (e.g., Castanias & Helfat, 2001; Zhang & Rajagopalan, 2004; Zhang and Qu, 2016). Furthermore, Rossette and Tost (2010) found in a series of experiments that female leaders are ascribed as being more agentic and rated more highly in general leadership effectiveness when the firms' successes are internally attributed directly to their efforts. These past findings imply that female insiders with a proven track record of success within their firms could forge local expectations about their competence and leadership ability that replace global gendered expectations by building relationships with key stakeholders in the organizations even prior to entering the role. How the successor's origin combines with the several foregoing predecessor influences is an open question, however. For instance, the potential just described benefits of being an insider female may be enhanced or diminished by a long-tenured or founder predecessor. On the one

hand, such a predecessor could play an active role in reinforcing the insider female CEOs' "in-group" status and proven track record. On the other hand, as we outlined above, the "larger than life" persona of a long-tenured or founding predecessor might be burdensome for the insider female who may be perceived as the predecessor's acolyte thereby diminishing her own effectiveness in the role.

Successor's inherited performance. Adding a further layer of complexity to the combinatorial nature of succession events, a successor's insider (outsider) origin is closely intertwined with the performance conditions that are inherited by the successor from the predecessor (e.g., Finkelstein et al., 2009; Karaevli, 2007). That is, outsiders are typically hired in contexts where there is at least the perception that change is needed i.e., by firms who are struggling in their performance. Outsider appointments are valued by boards both for the new skill sets that outsider CEOs bring, which may lead to performance turnarounds for struggling firms (Chen & Hambrick, 2012), and for the clear signal of change they provide that helps to assuage stakeholder expectations (Finkelstein & D. Aveni, 1994). In short, the prior performance conditions clearly affect "local" expectations in ways that may or may not amplify global stereotypes. Indeed, the 'glass cliff' arguments proposed in past research for the hiring of outsider female CEOs in distressed firm situations have received mixed support. One reason for these past equivocal findings is that prior firm performance may not operate as an independent mechanism shaping women's post-succession performance. Rather, the performance legacy operates in conjunction with the influences of the predecessor and the other facets of the succession context (Karaevli and Zajac, 2013). For instance, a positive (negative) performance inheritance could enhance (minimize) the combinatorial effect of the

predecessor's influence and the successor's origin on the successor female CEOs' subsequent successes.

Successor's Power. Somewhat mirroring the importance of the predecessor's power while he is CEO, whether the female successor is appointed as the chairperson when the CEO (i.e., CEO duality) also stands as a critical element that potentially contributes to the female successor's success. As noted above, duality itself may be part of the blueprint or expectations for a role: when a predecessor was powerful so too should be the successor—in order to fit local firm-level expectations (cf., Burton & Beckman, 2007). Conversely, when a powerful and/or long-tenured predecessor has already managed to weaken the influence of global stereotypic expectations through their gatekeeping function, it may be that the female successor may not need duality after all. In this situation, the insider female successor may be seen as meeting the local expectations of the role already (for reasons already discussed above) and thus might receive the support and endorsement from stakeholders who may eventually enable her success in the role. On the other hand, given that duality is a clear symbol of power, this position may enhance local perceptions of the female successor as meeting more global expectations. In any case, holding such a position of power provides the female CEO with more discretion, and thus agency, than if she didn't hold this dual role (Hambrick & Finkelstein, 1987).

In sum, how the predecessor's founding status/tenure, past power, and/or continued presence on the board combine with the female successor's origin, inherited performance conditions, and power to shape subsequent outcomes is a vital open question. Below we describe the qualitative comparative analysis approach we undertook

to systematically investigate whether and how these attributes and facets combine to affect female CEO success.

METHOD

We used the fuzzy-set approach to qualitative comparative analysis (fsQCA; Ragin, 2000; 2008) to examine how predecessor attributes and succession contextual elements combine to affect successors' firm performance among incoming female CEOs. This comparative case method affords a configurational approach (e.g., see Crilly, Zollo, & Hansen, 2012; Fiss, 2011; Misangyi & Acharya, 2014) that is especially well suited for our inquiry because it affords both a systematic and rich comparative analysis—through its use of Boolean logic and algebra—across a relatively larger number of cases than is conventionally possible through other cross-case comparative techniques (e.g., see Greckhamer et al., 2013). Detailed explanations of this methodology are presented elsewhere (e.g., Greckhamer, Misangyi, Elms, & Lacey, 2008; Ragin, 2000; 2008). We first describe our selection of cases, followed by an explanation of our coding of the cases' memberships in the outcome and each of the theoretically relevant attributes. We then briefly explain our primary and supplemental analytical approaches.

Data and Sample

Since generalizing the findings of fsQCA has to be done with care (Greckhamer et al., 2013) —as is true with any qualitative case-oriented analytical approach—we looked for all CEO succession events involving women that occurred over the past three decades among the S&P 1500 and Fortune 500 firms, given their prominence and representativeness of firm size (e.g., see Misangyi & Acharya, 2014). Our initial search resulted in a total of 98 female CEO succession events, from which we found complete

data for 84 cases that span the years of 1992-2009. In constructing our sample, we treated the year of succession as year t, and collected the relevant pre-succession attributes in years t-1 through t-3 and post-succession attributes in years t+1 through t+3. All the data comes from archival sources including firms' annual reports and proxy statements, press releases on succession announcements, the Business Week and Forbes executive database, Compustat's Annual and Execucomp files, and the Risk Metrics database.

Online Supplemental Appendix 1 presents the final list of female CEOs we studied.

Coding Cases' Set Memberships

In fsQCA, the theoretical attributes (predecessor influences, successor characteristics, contextual conditions) and outcome (firm performance) are each viewed as a set in which each case may have membership. Consistent with previous research, we coded membership in binary attributes using crisp sets (i.e., "fully in" or "fully out"), we used four-value fuzzy-sets to code attributes derived from qualitative data (i.e., fully in, more in than out, more out than in, fully out; Misangyi and Acharya, 2014), and we used the direct method of calibration in the fsQCA software to transform continuous quantitative data into fuzzy set memberships (based upon three qualitative thresholds; fully in, the crossover point, fully out; Ragin, 2008). We relied on existing theory and substantive knowledge to establish all calibration thresholds. Table 1 summarizes the calibration thresholds for each attribute under study, as well as the pertinent descriptive statistics of the underlying measures upon which the coding of set memberships was based.

Insert Table 1 about here

Outcome

Post-succession high firm performance. Following the extant CEO succession literature, we used the firm's performance over three years following the succession event—measured as average firm return on assets (ROA; i.e., net income divided by total assets) of years t+1, t+2 and t+3 (e.g., Cannella, Park & Lee, 2008; Cannella & Shen, 2001; Shen & Cannella, 2002). Consistent with previous studies that have examined firm performance as an outcome using QCA (Fiss, 2011; Misangyi & Acharya, 2014), we used this measure to code each case's membership in the set of firms with high post-succession ROA—i.e., a firm has to be an above-average performer within its industry to be in this set—based upon the following thresholds: firms that were at or below their industry median ROA were coded as fully out of this set, firms with ROA in the upper quartile of their industry (i.e., $\geq 75^{th}$ percentile) were coded as fully in, and the crossover point was the halfway mark between these thresholds. Industry ROA median and upper quartile scores were calculated using the three-year average post-succession ROA of all firms in the Compustat annual file in the same four digit SIC as the focal company.

Theoretical attributes

Predecessor tenure_or_founder. We measured predecessor tenure as the number of years the predecessor CEO served prior to the succession event. Given that the average tenure of large company CEOs is 9.7 years (The Conference Board, 2014) and that it takes roughly three years for CEOs to fully make their mark on a company (Hambrick & Fukutomi, 1991; Miller, 1991), we coded a fuzzy set to capture each case's membership in the set of succession events with a long-tenured predecessor CEO based on the following thresholds: cases where the predecessor's tenure was ≥ 10 years were coded as

fully in; predecessor tenures < 1 year were coded as fully out; and a tenure of 3 years was treated as the cross over point. We assessed each case's membership in the set of succession events where the predecessor CEO was a founder using a four-value fuzzy set: cases where the predecessor was the founder were coded as fully in; co-founders and members of the founding family were coded as more in than out; and cases where the predecessor was not any type of founder were coded as fully out. In cases where the predecessor was an interim CEO—as either described as such in media reports or who served for less than 12 months (Quigley & Hambrick, 2012)—we considered the CEO prior to the interim CEO appointment as the predecessor. Because either of these attributes should theoretically have a similar effect (e.g., forge a blueprint on the role), we thus used a meta-set in our sufficiency analyses consisting of the union of these two fuzzy-sets which captured each case's membership in the set of succession events where the predecessor had a long tenure or was a founder of the firm (via the "fuzzy or" function in the fsQCA software, which constructs a fuzzy set based upon the maximum value for each case of the two examined sets; Ragin, 2008).

Predecessor duality. Predecessor duality was assessed by examining whether the predecessors also served as the chairperson of the board while they were the CEO (i.e., predecessor CEO duality prior to the succession event). Each case's membership in the set of succession events where the predecessor CEO was also the chair was assessed with a crisp set such that cases where the predecessor was also the chair prior to the succession event were coded as fully in; otherwise, cases were coded as fully out.

Predecessor presence on board. Because outgoing CEOs may remain on the board for at least part of the first year after the succession event (Quigley & Hambrick,

2012), we didn't consider a predecessor's presence on the board to be meaningful unless they were on the board for at least two years post succession. Thus, we assessed each case's membership in the set of succession events where the predecessor remains on the board using a four value fuzzy set as follows: firms where the predecessor remains on the board as chairperson for at least 24 months after the succession date were coded as fully in; those where the predecessor continued as a board director or as vice-chairperson for at least 24 months were coded as more in than out; and cases where the predecessors were not on the board post-succession were coded as fully out.

Successor is insider. We measured the number of years each incoming CEO served as an executive of the focal firm prior to her becoming CEO and transformed this measure into a continuous fuzzy-set capturing each case's membership in the set of succession events where the successor CEO was an insider using the following calibration thresholds. Conventionally, an incoming CEO is considered to be an insider once they have spent at least 2 years in the company pre-succession (Shen & Cannella, 2002). We thus used this theoretical precedent as the crossover point and set the upper (pre-succession tenure of \geq 5 years, fully in) and lower (\leq 1 year, fully out) thresholds in manner that allowed us to capture the conceptual underpinnings of this attribute. That is, spending less than a year in the firm pre-succession would not afford the opportunity to develop a proven track record or the building of meaningful relationships; a presuccession tenure of five years would clearly provide ample time to do so.

Successor duality. Successor duality was assessed by examining whether the incoming female CEO was also appointed as the chairperson of the board. Given that it is common for predecessors to remain chair for at least some of the first year post-

succession (Quigley & Hambrick, 2012), we considered a successor to have duality if she was appointed as the chair by the end of the first year post-succession. Thus, we coded each case's membership in the set of succession events where the successor CEO had duality with a crisp set such that cases where the successor was also the chair by the twelfth month of their post-succession tenure were coded as fully in; otherwise, cases where coded as fully out.

Successor inherits poor performance. The final succession contextual element we examined is the performance conditions left behind by the predecessor, and past research suggests that there are two critical factors by which such conditions can be assessed (e.g., see Finkelstein et al., 2009): pre-succession firm performance (was it poor or not?) and the predecessor's exit (was it voluntary or not?). Given the conventional interest in the CEO succession literature around poor starting conditions, we captured poor pre-succession firm performance in a similar manner as described above for postsuccession performance (i.e., we used the average ROA in the 3 years prior to the succession event) and assessed cases for their membership in the set of firms with poor prior performance by using the converse of the above-described measure: cases with 3year pre-succession average firm ROA \leq 50th percentile of their four digit SIC industry ROA were coded as fully in; firm ROA $\geq 75^{th}$ percentile were coded as fully out; crossover point = the halfway mark between these thresholds. In coding the predecessor's exit, we were interested in whether the predecessor CEO left involuntarily (i.e., was fired) and did so by examining annual reports, proxy statements, company announcements, and news and media reports around the succession event. We also followed previous studies in using both predecessor age and their continued board

presence to corroborate our assessments (Shen & Cannella, 2002). We then used this data to assess each case's membership in the set of succession events where the successor CEO is dismissed using a crisp set: cases where the predecessor CEO was dismissed were coded as fully in; otherwise, as fully out. Because the successor clearly inherits a much less favorable performance legacy conditions when either performance was low or the predecessor left involuntarily, we used a meta-set to capture each case's membership in the set of succession events where the predecessor had poor performance OR left involuntarily (i.e., the union of these two sets via the "fuzzy or" function).

Analytical Technique

Sufficiency analyses

Primary analysis. The foregoing coding of cases' set memberships in the outcome and each of the theoretically relevant attributes sets the stage for conducting several types of analyses. Our primary analysis of interest involved examining whether the theoretical attributes specified above are sufficient for observing high post-succession performance, an analysis that relies upon an examination of subset relations (Ragin, 2000; 2008). Briefly, for any of the above attributes, or a combination of them, to be sufficient for observing high performance, their presence (or absence) will always be accompanied by the presence of high performance. As with past exploratory studies using QCA, we first used the sufficiency analyses to identify which, if any, of the combinations of the specified theoretical attributes were sufficient for post-succession firm performance, and we then further examined the cases underlying the sufficient configurations through more in-depth qualitative analysis to gain additional insight into how and why the particular combinations led to success (Aversa, Furnari, & Haefliger,

2015; Crilly, 2011; Misangyi & Acharya, 2014). In describing our results, we first report the configurations found in the sufficiency analysis and then discuss the findings from our subsequent qualitative analysis.

Technically speaking, the sufficiency of an attribute (or a combination of attributes) for observing the outcome is shown if membership scores in the attribute (combination) are consistently less than or equal to the membership scores in the outcome, where consistency "indicates how closely a perfect subset relation is approximated" (Ragin, 2008: 44). Subset relation consistency is therefore the metric by which sufficiency is evaluated. Because perfect subset relations (i.e., the particular explanatory condition is *always* present when the outcome is also present) rarely, if ever, exist, researchers determine a priori the minimum consistency threshold they deem acceptable (i.e., they settle for "quasi-sufficiency"; Ragin, 2000). In conducting our sufficiency analyses, we followed prior research (Misangyi & Acharya, 2014; Ragin, 2008) and 1) set the minimum raw and PRI consistency thresholds to > .75 and, 2) utilized the natural break in raw consistency scores during the analysis as the threshold consistency. We report the actual levels of both types of consistencies used for each analysis in the footnotes of the results tables. With respect to solution consistency, we used a minimum acceptable overall solution consistency of .80 (Ragin, 2008). We set the minimum frequency in the analyses to two cases per configuration as this was required to have an inclusion rate of at least 80% of the cases (see Ragin, 2008; Rihoux & Ragin, 2009).

Contingency analyses. Although control variables are neither required nor possible in QCA (e.g., see Misangyi et al., 2017), we sought to examine whether several

additional conditions affected how the foregoing theoretical attributes combined for the successful cases. Though not specific to succession contexts generally, these conditions have nevertheless been shown by previous research to be important to the phenomena under study. In particular, the degree to which the industry is male or female dominated (e.g., Joshi, Son & Roh, 2015) and the presence of women on the board of directors has been found to be important to female executive success (e.g., Zhang & Qu, 2016).

Previous research also suggests that firm size has an effect on firm ROA (e.g., Hansen & Wernerfelt, 1989). Therefore, to examine what, if any, effect these conditions may have on our main findings, we performed three additional sufficiency analyses in which each of these conditions were examined as contingency conditions.

We coded each case for their membership in each of these sets as follows. Cases with one or more female directors on the board other than the female successor CEO were coded as fully in the set of succession events that occurred in firms with *women on the board* of directors; otherwise they were coded as fully out. We captured succession events that occurred in *male-dominated industries* using a continuous fuzzy set: cases in industries where the ratio of male senior executives to total senior executives ≥ .85 were coded as fully in; cases in industries with a proportion of male senior executives to total senior executives ≤ .50 were coded as fully out; the cross-over was coded as a proportion of .70. Examples of male-dominated industries include computer equipment manufacturing (SIC 3577), data processing and computer programing services (SIC 7374), beverages manufacturing (SIC 2086), and chemicals and chemical preparations (SIC 2899). *Large firm size* was measured using the net sales in the year of succession for each firm obtained from the Compustat database. Extant research generally defines large

firms as having sales in excess of \$100 million and thus we coded firms as being fully out of this set if their net sales were \$100 million or less. We then used the distribution of the data and used the median (sales = \$951.2 million) as the crossover point, and the 75th percentile (quartile 3) as the fully in threshold (sales = \$2817.7 million).

Supplemental analyses. We performed two additional sufficiency analyses. First, we followed the conventional practice of examining the sufficiency of the specified theoretical attributes for the absence of the outcome—i.e., for not-high post-succession firm performance (e.g., Greckhamer et al., 2008; Misangyi & Acharya, 2014; Ragin, 2008). Second, we also sought to understand how the findings with respect to women CEOs compares to that of men CEOs. To do so, we examined the sufficiency of the studied theoretical attributes for both high and not-high post-succession firm performance on a matched sample of male CEO successions.

Robustness analyses

We also further investigated the robustness of the main results through three additional analyses. First, we examined the *necessity* of the various attributes under study for achieving high performance. Second, we conducted a *diversity analysis* to examine the configurations that existed empirically but were not sufficient for performance (Greckhamer et al., 2008). Finally, given that we are interested in understanding women's success, and that tenure in the new role has been used as a measure of success in past research (e.g., Burton & Beckman, 2007), we also sought to examine whether our findings were robust to this alternative measure.

FINDINGS

We first provide key sample descriptives. With respect to the outcome of interest—post-succession firm performance—59 of the 84 female CEOs had a non-zero fuzzy set membership score (i.e., ROA above their industry median), and 44 cases had a membership score above the cross-over point of the high performance fuzzy-set (i.e., were "more in than out" to "fully in" this set). All but one of the predecessors to the female successors were male CEOs (Anne Mulcahy was the only female predecessor CEO to Xerox CEO Ursula Burns). The average tenure of the predecessors was 9.3 years (see Table 1), and 39 percent of the cases involved predecessors with 10 or more years of tenure. Twenty-one (25%) of the predecessors were founders or a part of the founding family of their firms. Fifty-seven (69%) of the predecessors were dual CEOs prior to the succession. Out of these, 15 remained on the board post-succession (14 as chairperson and one as a director). Four predecessors were not chairpersons when CEO but were then appointed as chairperson post-succession, and another three remained on the board as a director (in total, 22 predecessors remained on the board). In terms of the female successors, 51 of the 84 (61%) were insiders (average pre-succession tenure was 7.7 years; see Table 1). Within a year of assuming the CEO position, 28 (33%) of the successors were appointed as the chairperson of the board (i.e., dual CEOs). Only 21 (25%) of the female successors inherited poor firm performance from their predecessor, and in 13 cases, the predecessor left involuntarily.

Configurations Sufficient for Women CEOs' High Performance

The primary analysis involved examining the sufficiency of the studied theoretical attributes for observing female CEOs who achieved high post-succession firm performance. The results of this analysis are reported in panel 1 of Table 2. As the table

shows, there are three different recipes for women's success as a CEO, which cover 24 of the 44 cases in our sample (55%) that are above the cross-over point of the set of high performing firms¹. The results of each of the contingency analyses which examined the effect that women on the board, male-dominated industries, and firm size have on the main findings are reported in panels 1 through 3 of Table 3, respectively. In essence, and as we describe below, these contingency analyses show the contexts in which the three different recipes found in the main analysis tended to occur.

Before further describing the results, note that we interpret and report the intermediate solution produced by the fsQCA software in the configuration tables (e.g., Fiss, 2011; Misangyi & Acharya, 2014) and denote the presence and absence of attributes within each configuration as follows: central conditions are denoted by (present) and (absent) while contributing conditions are represented by (present) and (absent). Core conditions are decisively sufficient given that they rest upon the existing data among the studied cases rather than on counterfactual analysis, while the inclusion of contributing conditions in the solution are derived from counterfactual analysis (see Ragin, 2008). Thus, although reporting this distinction is important for transparency reasons, an interpretation of core conditions as being theoretically more important than contributing conditions is only relevant when one *a priori* theorizes about such a distinction ((Misangyi, Greckhamer, Furnari, Fiss, Crilly & Aguilera, 2016); e.g., see Fiss, 2011; Grandori & Furnari, 2008). Therefore, we denote this distinction for

¹ Coverage is a measure of empirical relevance in QCA—akin to the R² in regression (Fiss, 2011)—but does not equate to the proportion of cases covered by the configuration or solution (see Ragin (2006) for a detailed discussion of how coverage is calculated in QCA). Thus, in addition to the conventional reporting of the raw and unique coverage of each configuration as well as the overall solution coverage, we also report the actual number of cases in each configuration as well as the proportion this represents of the relevant cases (here the high performing cases).

transparency, but do not distinguish between the conditions in our theoretical interpretations.

Insert Table 2 about here

Handing Over the Legacy

Configuration 1 of Table 2 shows that when powerful long-tenured predecessors completely handed over the reins of power to insider female successors of favorably performing firms, this was sufficient for observing high post-succession firm performance. In this configuration, female successors were long time insiders (13 years on average in the company before becoming a CEO) who followed long-tenured (14 years as CEO on average; four were firm founders) predecessors. All of the predecessors enjoyed the power of board chairpersonship while they were CEOs and then fully relinquished this power to their female successors (all predecessors retired): all of the female CEO successors in this configuration were appointed chairperson of the board within a year of their succession. A total of 12 women (or 27% of the 44 high performing cases) followed this recipe for success, including DuPont's Ellen Kullman, Mattel's Jill Barad, Pepsi's Indra Nooyi, and Xerox's Anne Mulchahy and Ursula Burns.

To gain a deeper insight into the workings of this combination of attributes, we further analyzed these 12 cases comprising this configuration by examining the company websites, annual reports, press releases, and succession announcements as well as news articles, business reports, and books on the cases. Our deeper qualitative analysis identified three additional mechanisms as underlying how the studied theoretical attributes combined for success.

The first mechanism, mentoring and sponsorship by the predecessor, was a common theme across all of the 12 cases in this configuration. The predecessors handpicked the female successors for positions of responsibility and mentored them to take challenging roles that not only increased the breadth of their functional experiences, but also helped them to gain visibility in the organization as successful leaders. Indra Nooyi's rise at Pepsi is illustrative: when Steve Reinemund became the CEO of Pepsi Co., he made Indra Nooyi his second in command (she was CFO and President). He is famously quoted as having told Nooyi "I can't do it unless I have you with me" (Smith, 2015). CEO Linda Lang of Jack in the Box presents another good example, as captured in a post-succession reflection given by her predecessor CEO, Robert Nugent, on his influence on Lang's career progress: "I'd ID'd Linda early on....It quickly became clear to me that she was very astute about financial matters....I told her that before she could move up any further, she'd have to serve in operations" (Green, 2006). Nugent put Lang in charge of the Southern California region, which provided her with the operational experience she needed to become president, COO and later CEO when Nugent retired in 2005. Similarly, Paul A. Allaire, former Chairman and CEO of Xerox, not only mentored his successor, Anne Mulchahy, but also had a hand in sponsoring her successor, Ursula Burns. CEO Ellen Kullman (DuPont) and Jill Barad (Mattel) also have explicitly credited their predecessor CEOs, Charles Holliday and John Amerman, respectively, as being pivotal to their development as the future leader of their firms. Moreover, in three cases, the sponsoring predecessors were also the founder of the company and in two of these the female successors were daughters of the founders (Claire C. Skinner, CEO of All American Group; Marla Schaefer, Co-CEO of Claire's Stores).

The second set of mechanism underlying this configuration was more structural in nature as the organizations either had founder(s)that supported gender inclusion or organizational programs that promoted diversity within the company. Our analyses revealed that in five of the 12 cases (All American Group Inc., Bombay Company Inc., Claire's Stores, Edgewater Technology Inc., Lenox Group) gender inclusion at the very top was initiated in the organizations by the founding top management, while the remaining seven cases (Avon, DuPont, Jack in the Box, Mattel, Pepsi, Xerox) had cultural practices aimed at gender inclusion. For example, Xerox Corporation, where two female executives –Anne Mulchahy and Ursula Burns—rose to the position of the CEO, has a long history of "promoting inclusion and understanding" and cultivating a "pluralistic environment" (Allen, 1998) where women are supported and encouraged to rise through the management ranks to hold powerful top positions. PepsiCo's "strong legacy of leading in diversity practices" (PepsiCo, 2016) is another exemplar; women have been on its board since the 1950s. Moreover, these inclusive organizational practices were actively promoted by the long tenured and powerful predecessors who were clearly committed to fostering inclusive cultures in all seven of these companies. For example, Steve Reinemund, Indra Nooyi's predecessor at PepsiCo, acknowledged his commitment to diversity in a post-succession interview: "As CEO, I spent a lot of my time on diversity. It's a business opportunity and the right thing to do. Diversity, for a consumer-products company, is obvious to me. We can't grow as a company if we don't represent our consumers from the frontline to the boardroom." (Erisman & Beenan, 2007).

The results of the contingency analyses are reported in Table 3 and show that the 'handing over the legacy' recipe for high post-succession performance tended to occur in firms with women represented on the board of directors (configuration 1, panel 1), in male-dominated industries (configuration 1, panel 2), and among large firms (configuration 1, panel 3). Perhaps most interesting are the results with respect to maledominated industries: panel 2 shows that the 'handing over the legacy' recipe (configuration 1)—the one configuration in which power is passed from the predecessor to the successor— is the only configuration that occurred in male-dominated industries. Moreover, the results suggest that structural mechanisms (i.e., founders or organizational programs that promote gender inclusion) are particularly important for buffering the effects of global male-typed schema in male-dominated industry settings. Furthermore, which of these mechanisms were at work was contingent on firm size: organizational programs promoting gender inclusion occurred in large firms (configuration 1, panel 3), whereas all but one of the five cases in which founders supported gender inclusion were smaller firms. The findings with respect to women on the board (configuration 1, panel 1) revealed that all seven large firms with gender inclusive programs had at least one additional woman beyond the female CEO, while three of the organizations with inclusive founders did.

Insert Table 3 about here

Partnering the Legacy

Configuration 2 (panel 1, Table 2) captures a second path to women CEO success: while here again the women successors were long-term insiders (13 years on average)

who inherited high performing firms from long tenured predecessors (eight years as CEO on average; three of the seven cases were firm founders), this second scenario differed from the first configuration with respect to power. Here, neither the male predecessors nor the successors were chairpersons of the board while they served as the CEO. Nevertheless, this suggests that a match in the predecessors' and successors' dual statuses (i.e., the lack of) was again an ingredient for success.

Our deeper qualitative analysis on the cases making up this configuration was again revealing. First, similar to configuration 1, a common mechanism found to be underlying all of the 'partnering the legacy' cases was the *mentoring and sponsorship by the predecessor* of the female executives prior to their ascendance to the CEO role. To pick just one example, Kimberly McWaters, the CEO of Universal Technical Institute (UTI), credits her predecessor, Robert Hartman, as playing a critical role in her development as a leader. Early in her career, Hartman actively advised McWaters to develop her management and leadership skills, including encouraging her to pursue an undergraduate degree in business.

Second, and unlike in configuration 1, we found an experience-profile match between the predecessor and successor and a similarity in the career pathways as a common structural mechanism across these cases. As just described above, Kimberly McWaters of UTI held several different cross-functional roles within UTI before leading the firm that were a mirror image of her predecessor's rise to CEO. Similarly, Tamara Lundgren, CEO of Schnitzer Steel Industries (SSI) matched predecessor John D Carter's profile: both Lundgren and Carter had legal educational backgrounds from elite universities, were partners in law firms in the initial phases of their careers, and had

eventually accumulated functional experience in consulting, finance and management. Given that in all of these cases the predecessor CEOs were long tenured, this finding is consistent with the notion that these predecessors forged expertise and skills based blueprints on the role, and that the female successors' matching these role imprints was an important structural mechanism underlying the subsequent success of their female successors.

Our qualitative analyses also uncovered an additional mechanism that differed from the clear absence of the predecessors' post succession influence in configuration 1: the female successors in this second configuration led their firms in a post-succession partnership (hence 'partnering the legacy'), a partnership which occurred in large part with the predecessors. Indeed, the data revealed that in five of the seven cases that made up this configuration, the predecessor stayed on the board and played a guiding role post succession (three became chairman of the board post succession; two were firm founding members and remained as directors). For example, when Tamara L. Lundgren succeeded John D. Carter as CEO of Schnitzer Steel Industries, the succession announcement emphasized "the complementary combination of Mr. Carter and Ms. Lundgren". Similarly, in the press release announcing the succession of AMN Healthcare CEO Susan Salka, co-founder and predecessor Steven C. Francis said, "I am very confident in Susan's ability to lead AMN Healthcare with its growth healthcare staffing industry. I look forward to my ongoing role in providing guidance and oversight to the company." In the remaining two cases where the predecessors completely exited the firm in the post succession period, the female successor CEOs — Linda Huett at Weight Watchers and

Stephanie DiMarco at Advent Software—led their firms in partnership with their powerful board chair counterparts.

The results of the contingency analyses reported in Table 3 again shed light on the contexts in which this configuration was embedded. Specifically, the 'partnering the legacy' scenario occurred in non-male-dominated industries (configuration 2, panel 2), among smaller firms (configuration 3, panel 3), and regardless of whether there were women on the board of directors (configurations 2a and 2b, panel 1). Thus, the contingency results suggest that while the mentoring mechanism is not contingent upon the embedded context, the predecessor's influence on female success in smaller firms and in relatively gender-integrated industry settings (such as apparel and accessories, educational services) where global male-typed schema are less likely to be prevalent involved an additional agentic (partnering post-succession) and a different structural (expertise and skills blue print for the role) mechanism. Moreover, while the 'power' role imprint still operated here, the embedding context affected its operation: in gender-integrated industries, this structural mechanism involved not having the power of the chair.

Turning Around the Legacy

The third combination (configuration 3, panel 1, Table 2) for high post-succession firm performance involved powerful long-tenured predecessors (all dual CEOs, tenures of 12 years on average, three of the five predecessors were firm founders or founding family members) who turned over poorly performing firms to their insider female successors (pre-succession tenures of 7 years on average), and all of the predecessors remained as chair of the board post succession.

Our deeper analysis of the cases in this configuration suggested that two mechanisms drove the predecessors' influence on the incoming female executives' successes: predecessor pre-succession mentoring and post succession partnering. Indeed, our analyses revealed that the female successors were essentially protégés of their predecessors both before and after succession. Two cases exemplify this scenario. Rite Aid's Mary Sammons, whose predecessor, Robert Miller, was her boss and mentor both at Rite Aid and at Fred Meyer beforehand; Miller had served as Sammons's mentor for over a decade altogether. When Miller handed over the CEO post at Rite Aid to Sammons, he proclaimed: "I intend to be an active chairman, assisting with strategic planning and working with Mary and the senior management team." Another example is Angela Braly who before taking over the CEO post served as president of WellPoint Inc. under her predecessor, Larry C. Glasscock. In the succession announcement, Glasscock said, "Angela has been one of my most trusted and valued colleagues, partnering with me on literally every major strategic initiative undertaken by the company [...] In my ongoing role as WellPoint's Chairman, I look forward to continuing to work closely with Angela."

The contingency analyses then suggest that the only contextual condition applicable to the 'turning around the legacy' scenario has to do with the size of the firm – that is, this configuration occurred in larger firms (see Table 3). This scenario did not appear among the sufficient configurations with respect to women on the board or maledominated industry.

Supplemental Analysis 1: Women CEOs' Not-High Performance

We examined what, if any, configurations of the main attributes were sufficient for women's 'not-high' performance. The findings are reported in panel 2 of Table 2.

Configurations 1a and 1b —which are "neutral permutations" of each other given that they share the same central conditions and differ in their contributing conditions (Fiss, 2011)—centrally involved outsider female CEO successors who inherited poor performance from predecessors that exited the firm and the board post-succession indeed, half of the predecessors were fired. In 10 of the 12 cases across these two configurations, the predecessors were long tenured. Interestingly, configuration 1a provides a direct contrast to the 'turning around the legacy' scenario for success found in our main analysis as it involves female CEOs who inherited unfavorable performance. Moreover, it is worth noting that the findings also show that this failure condition occurs regardless of the female successors being appointed as the board chair (five of the eight cases in configuration 1a held such power). Configuration 2 (panel 2, Table 2) further shows that outsider female successors (who lacked mentoring or partnering) failed regardless of the inherited performance conditions. In three of the five cases, the female successor inherited unfavorable performance (and in two of these the predecessor was fired), in the other two cases the successor inherited favorable performance.

In short, the findings of this first supplemental analysis show that female CEOs did not achieve high performance when they were outsiders who were not afforded the mentoring or partnering relationship with their predecessors before or after becoming CEO.

Supplemental Analysis 2: Configurations Sufficient for Men CEOs' Performance

We sought to understand how the recipes for success among women compare to those for men. Therefore, we conducted sufficiency analyses of the main attributes under study for both high and not-high performance on a matched sample of men². Descriptively, the male and female successions are similar in most aspects: 56 out of the 80 male CEOs had a non-zero fuzzy set membership score (as compared to 59 of the 84 women), 40 of which had a membership score above the cross-over point (44 for women). In the male sample, the average predecessor tenure was 8.5 years (9.3 years for women), 21% of the predecessors were founders or a part of the founding family of their firms (25% for women), 70% of the predecessors were dual CEOs (vs. 69%), and 15% of the male successor CEOs followed a predecessor who was fired (vs. 15%). There were, however, some interesting differences between male and female CEOs: 13% of the male cases (39% among the women) involved predecessors with 10 or more years of tenure, 31% of the male cases (vs. 26%) had predecessors that stayed on the board postsuccession, 49% (vs. 61%) of the male successors were insiders with an average tenure of 5.4 years (vs. 7.7 years), 21% (vs. 33%) of the male successors were appointed chair, and 36% (vs. 25%) of the male successors inherited poor performance. This last descriptive dispels the notion that women CEOs were generally set up to fail—evidently, men were more vulnerable to this in our sample.

The sufficiency analyses results are reported in Table 4; panel 1 shows the configurations sufficient for high performance and panel 2 reports the solution for not-high performance. Starting with the solution for men's high performance (panel 1; Table

² We identified a matching sample of succession events involving male CEOs which occurred in the same year (and when none occurred, the year before), the same four-digit SIC industry code (and where none, the same three-digit SIC), and in a firm of similar size (as measured by market capitalization). Based upon this matching process, we were able to find complete data for 80 matching men cases.

4), configuration 1 (panel 1, Table 4) shows a combination that is essentially the same scenario as the 'partnering the legacy' scenario found for women (see configuration 2, panel 1, Table 2), but here the male successor were *outsiders* who had stellar reputations for their past leadership experience (and two out of the five cases had prior experience as CEOs) at other companies who replaced highly successful predecessors that remained actively involved in strategic decision making in the post-succession period. Thus, in contrast to the deep mentoring relationships that contributed to women's success in this scenario, successful men were outsiders who were hand-picked by their predecessors and brought into the firm in high-level executive positions for a relatively short grooming period prior to succession (i.e., a year or less). Configuration 2 (panel 1, Table 4) shows a recipe for men's success similar to the 'handing over the legacy' recipe for women—a powerful long-tenured predecessor handed over board chairmanship and favorable performance to the male successor CEO—but here again success among men occurred when the male successors were *outsiders*. Configuration 3 for men's success does not have a direct parallel among those configurations found for women, and clearly does not afford the opportunity for mentoring by the predecessor (given that the predecessor was short-tenured).

The solution for men's not-high performance further illuminates the differences between male and female CEOs. Configuration 1 of this solution (panel 2, Table 4) suggests that men failed when they inherited a poorly performing firm, and while women were outsiders when failing in this same scenario, both insider and outsider men fail; indeed, only three of the 10 male cases came from the outside. The differences between male and female CEOs is further highlighted by configurations 3-4 of the men's not-high

solution: they show that *insider* male successors also fail to turn their firms around when handed poor performance from long-tenured (and often powerful) predecessors (who often stayed on the board post succession).

In summary, whereas *insider women*—who were either handed over the legacy or who partnered the legacy with their predecessors—succeeded when they inherited positive performance legacies from long-tenured predecessors, it was the *outsider men* who succeeded under the same conditions. When it comes to inheriting poor performance, while insider female protégés succeeded in turning around their companies in partnership with their powerful predecessors who stayed on the board ('turning around the legacy'), the results show that insider men were unable to turn around poorly performing firms under the same conditions. In short, the main mechanisms that appear to underlie the workings of the combinations sufficient for female success were not found to afford high post-succession firm performance to male successors.

Robustness Analyses

Analysis of necessity. Given the foregoing findings, we had a particular interest in examining the necessity of the predecessors' long tenures, presence on board, or the successors' origin for observing high post-succession performance. That is, we examined whether one or the other of these attributes "must be present for the outcome in question to occur" (Ragin, 2000: 91). Table 5 reports the results of this analysis for both women's and men's high performance. The results show that none of the attributes under study were necessary alone for post-succession performance, assuming a benchmark consistency of .80 (see the footnote to Table 5 for a more detailed explanation). As shown at the bottom of Table 5, however, a necessary condition for women's success that

occurred across all of the studied cases (i.e., including also those cases that were not part of the sufficiency solutions) was that the predecessor was either long tenured *or* stayed on the board post-succession. The results also show that female success among *all of the studied cases* depended upon having either a long-tenured predecessor or a female insider. Moreover, the results show that these same attributes were not necessary for men's success.

Analysis of diversity. The sufficiency analysis covered approximately half of the successful female cases, and we therefore sought to investigate the remaining non-sufficient configurations (i.e., those that were not sufficient for high performance) through a diversity analysis (e.g., see Greckhamer et al., 2008). We report the full details of this analysis in Online Supplemental Appendix 2. Briefly, the analysis allowed us to examine the most frequently occurring non-sufficient configurations and we found that there were six such configurations, which differed by just one attribute from one of the three success recipes found in the sufficiency analysis reported above. This analysis thereby showed the importance of each particular ingredient to the respective recipe for success and thus further corroborated the three main recipes of female success found in the sufficiency analyses.

Alternative outcome: women's post-succession tenure. As noted above, post-succession tenure length in the new role has been considered as a meter of success in studies examining the influence of predecessors on successors (e.g., Burton & Beckman, 2007) and we thus also examined the robustness of our findings to this alternative measure. To do so, we captured the tenure of the female CEOs using a fuzzy-set calibrated similar to that used to capture predecessors' pre-succession tenures: successors

with post-succession tenures ≥ 10 years were coded as fully in, tenures of ≤ 1 year were coded as fully out, and the cross-over point was 3 years. We then examined the sufficiency of the main attributes for observing longer post-succession tenures among women. The findings are discussed in Online Supplemental Appendix 3. In brief, the findings further corroborated our firm performance results and provided additional insights into female CEOs' success. The configurations found to be sufficient for observing longer tenures among women represent the 'handing over the legacy', 'partnering the legacy', and 'turning around the legacy' recipes and thereby further cement these success scenarios. Further, our findings suggest that while mentoring was a crucial mechanism for female CEOs' post-succession performance success, it was not integral to their longer tenures.

DISCUSSION

Past research on female executives has often relied on the assumption that global male-typed leadership schemas uniformly impose barriers on the success of women entering into leadership roles. While immensely valuable, this past lens has deflected scholarly attention away from examining the proximal influence of organizational agents and the local context on either reinforcing or mitigating the effect of male-typed schema on women leaders' effectiveness. We integrated past research on female leadership, executive succession and male gatekeeping to investigate how several attributes of the (mostly) male predecessor CEOs combined with key facets of the succession context to jointly determine women CEO's subsequent performance. Our exploratory qualitative comparative case study of all the female CEO succession events across the largest US firms over 20 years uncovered three different combinations of the studied theoretical

attributes sufficient for the success of female CEO successors. In essence, our findings show that certain enabling factors and the local context set the conditions for *gender-inclusive gatekeeping* wherein male predecessors facilitated female leadership effectiveness.

Overall, our findings clearly suggest that the long tenure of the male predecessor and the insider origin of the female successor are both essential enablers of female success—not only are both of these conditions part of all three sufficient recipes for female success, but our analyses revealed their necessity: one or the other of these conditions was always present across all of the empirically-occurring configurations (sufficient or not) of women's success. Our results clearly show that these two essential conditions enabled gender-inclusive gatekeeping by combining with the local governance structure and the embedding context to form three different recipes for success. Two of these success recipes involved a favorable performance legacy in which the long-tenured predecessor either handed over to, or partnered with, and insider female successor. In the third scenario, the long-tenured predecessor guided the insider female successor to turnaround an unfavorable performance legacy. Moreover, our findings regarding female 'not-high' performance reinforced the importance of women's insider origins: failure occurred when women where outsiders who inherited unfavorable performance from long-tenured predecessors.

Our deeper analyses of the sufficient cases revealed several mechanisms underlying these recipes for success. One mechanism was common across all three recipes: the pre-succession mentoring and sponsorship of the insider female successors by the long-term predecessors. In addition to this rather agentic mechanism, the

successful cases revealed that the local governance structure—the predecessor's and successor's power while CEO as well as the predecessor's post-succession board presence—was another key enabling condition. In the 'handing over the legacy' recipe, the mentoring and sponsorship mechanism appeared to work in conjunction with two other mechanisms that were more structural in nature: the successors' appointments as chair of the board fulfilled the predecessor's 'power' blueprint on the CEO role, and they rose in firms founded by leaders that promoted inclusiveness or that had well-established diversity programs.

The 'partnering the legacy' recipe involved the mentoring and sponsorship mechanism in conjunction with another agentic mechanism: the insider female successors worked in partnerships with the chairmen of their boards (who most often, but not always, were the predecessors) post-succession. The structural mechanisms also at work here differentiated this second success recipe from the first: the successors had background experiences that mirrored those of their predecessors and thereby appeared to fulfill an experience blueprint left by the long-tenured predecessors on the CEO role. Moreover, the successors' non-duality matched the predecessors 'power' imprint for a non-dual CEO. Finally, The third recipe, 'turning around the legacy', involved two agentic mechanisms: the powerful long-tenured predecessors who remained the chair of the board post-succession mentored their insider successors and partnered with them to help turn around poorly performing firms.

Our analysis of several contingency conditions—the presence of women on the board, the degree to which the industry was male-dominated, and the firm size—provided deeper insight into the three recipes of success by highlighting the important role that the

firm's context plays in facilitating female leaders' successes. Most noteworthy is the affect that the local male-dominated nature of the industry in which the firms were embedded had on the recipes for success. Specifically, the 'handing over the legacy' recipe occurred in male-dominated contexts, wherein global male-typed schema are likely amplified, and involved structural mechanisms that would seem to directly play to or help mitigate global male-typed schemas—the female CEOs' were given power (to match the predecessor CEOs' power blueprint) and rose through the ranks of organizations with founders or practices that advanced gender inclusion. The 'partnering the legacy' recipe, on the other hand, tended to occur in industries with a relatively higher proportion of women executives—and thus an embedding context in which male-typed schema are already blunted—and involved structural mechanisms that helped to meet local expectations set by the predecessors' experience profile (in the form of a role blueprint) and non-dual status as a CEO. Moreover, partnering with the chairperson was a mechanism for success in such contexts.

Of our several supplemental analyses, we highlight here the findings of the sufficiency analysis of a matched sample of male CEO succession events which occurred in firms of similar size in the same industries and in the same succession year as the focal female CEO successions. Our findings showed that the configurations of men's success and the mechanisms that underlie them differed markedly from women's success configurations. Successful male CEOs were outsiders who received a brief period of presuccession grooming from the predecessor. The 'not-high' performance configurations also differed: male successors were not able to turn poorly performing companies around when they followed long-tenured predecessors, regardless of the predecessors' presence

on the board and the male successors' origins (both insiders and outsiders failed).

Overall, across the studied succession events, these comparative findings between men and women show that the mechanisms that have allowed women CEOs to successfully lead S&P 1500 and Fortune 500 firms are not the same for men under similar circumstances.

Toward A Theory of Gender-Inclusive Gatekeeping for Women's Leadership Effectiveness

Our initial theoretical framing positioned predecessors as key organizational agents who, functioning as inclusionary (exclusionary) gatekeepers, could shape the initial conditions of success (failure) for women entering leadership roles. The role of predecessors in the success of incumbents has been recognized across many disparate streams of research (e.g., Beckman & Burton, 2007; Joshi et al., 2010; 2011; Wade-Benzoni et al., 2008). In these previous accounts, the predecessor has been viewed as a temporally distal albeit important influence on the success of incumbents. Our findings contribute to this domain by highlighting the more proximal effects of predecessors and go much farther in uncovering the conditions under which mostly male predecessors engage in "gender-inclusive gatekeeping" that can buffer the effects of pervasive maletyped leadership schema on women's success in leadership roles. Whereas past conceptualizations of gatekeeping have typically referred to exclusionary actions taken by individuals or groups in prestigious occupations or the upper ranks of organizations (Merton, 1957), including how men have restricted women's access to rewards in maledominated professions (e.g., Briscoe & Joshi, 2016; Reskin & Padavic, 1988), our research highlights conditions under which male-gatekeepers can also play an inclusive role.

Male predecessors did not always play an inclusive gate-keeping role. Indeed, our inquiry revealed that inclusive gatekeeping occurred only when a confluence of local enabling conditions allowed the predecessor to support the female executive's entry into the CEO role, forming multiple recipes for female success. Based on our findings, we offer a mid-range theory of gender-inclusive gatekeeping for female successors' effectiveness in the upper echelons: male predecessors serve as critical gatekeepers when particular local enabling conditions and the embedding context facilitate the success of female leaders through both agentic and structural mechanisms that operate to alter local leadership schemas (see Figure 1).

Insert Figure 1 about here

As Figure 1 shows, the predecessors' legacy—reflected in their long tenure or founding status as well as the performance conditions they leave behind—and the successors' insider origins are two essential ingredients that together enable gender-inclusive gatekeeping in the upper echelons of organizations. As we elaborate below, these conditions together foster the agentic and structural mechanisms through which the predecessors may alter local leadership schemas. The predecessor's legacy, particularly his long tenure or founding status, allows him to imprint normative expectations on the role as well as to shape the inclusive diversity practices of the firm. It also gives the predecessor an opportunity to endorse and mentor the female successor as she rises through the ranks of the organization. The successor's insiderness enables her to benefit from the predecessor's endorsements, to gain role specific and idiosyncratic skills from

the predecessor as her mentor, and to generally benefit from inclusive organizational practices.

Although our theory is applicable to the highest ranks in firms, we nevertheless expect these two enablers of gender-inclusive gatekeeping – the predecessor's legacy and successor's insider origin—to generalize to other organizational settings, such as lower level organizational leadership transitions or to other professions where women transition into high visibility leadership roles. In these other contexts, the predecessor's legacy, such as the resource benefits or burdens they leave behind, or the successor's tenure and prior working relationship with the predecessor are likely to influence women's success in leadership roles as well. Furthermore, we call for future research to explore other local enabling conditions beyond the factors that we examined. With respect to the predecessor, it seems reasonable to expect that other attributes (prestige, reputation), individual differences (openness, empathy), or leadership types (charismatic or transformational) may lend to more (or less) effective gender-inclusive gatekeeping. Similarly, future research could consider other attributes of the successor that allow her to take advantage of the inclusive gatekeeping. For instance, in professional settings, does a long-term partnership with the predecessor (in lieu of insider status) through professional networking associations facilitate gender-inclusive gatekeeping? Moreover, is genderinclusive gatekeeping more likely in firms that rely on internal labor markets or is it feasible under some conditions in firms that also draw on external hires to increase women's representation in managerial ranks?

We also propose that other local conditions are critical to gender-inclusive gatekeeping, operating as either enablers or contingencies. Our theorization suggests that,

at least in the upper echelons, the governance structure—including at a minimum the power ascribed to the CEO role—is an important enabler of the agentic and structural mechanisms that affect local perceptions of leadership (see Figure 1). Corporate governance structures help to define the normative expectations regarding local expectations of the power held while being CEO as well as determine whether the predecessor is present post-succession to partner with the successor. The beneficent view of predecessors' post-succession presence uncovered by our findings departs from past research that has viewed this presence as a constraint on an incoming executive (Quigley & Hambrick, 2012). In contrast, we posit that for female executives, the predecessors' continued presence can provide the means for an active partnership that empowers an incoming female leader to perform effectively in the CEO role, and in some cases, to even turnaround poor performance. While we believe that the governance structure is a key construct in a theory of gender-inclusive gatekeeping, this enabling condition may manifest itself in different forms depending upon the organizational context. For instance, future research at lower organizational levels should consider how a firm's performance management and accountability structures shape the normative expectations associated with the particular role with implications for the successor's effectiveness. Furthermore, in lower level leader transitions, the predecessor may continue on as the successor's immediate boss, a relationship which would thereby further enable both the endorsing and partnering agentic mechanisms found to operate in the upper echelons.

Our findings also show that one facet of the embedding context of the firm can play a critical role in whether gender-inclusive agentic or structural mechanisms enable women leader's effectiveness: the degree to which the industry is male-dominated. In

highly male dominated environments, intervening structural mechanisms—that is, organizational practices that promote inclusion—were influential in altering local firm leadership schemas, while in non-male dominated contexts agentic mechanisms – that is, post-succession partnering with the predecessor—were integral to women's success. Given that male dominated settings may amplify male-typed leadership schemas in many different organizational contexts, including lower-level leadership transitions, our finding that intervening structural mechanisms that alter male-typed schemas are even more important for women's success in these local male-dominated settings is striking. We recognize that other facets of the local context beyond male-dominated environments could also shape structural interventions aimed at gender-inclusive gatekeeping in similar ways. For instance, other institutional and regulatory pressures faced by firms within an industry segment may shape the nature of structural interventions they adopt to enable gender inclusion at the highest levels. Thus, we call for further research on other attributes of the embedding context of firms that can function as contingencies shaping gender-inclusive gatekeeping by key organizational agents such as predecessors.

As the foregoing already highlights, gender-inclusive gatekeeping operates through both agentic and structural mechanisms that alter local male-leadership schemas and facilitate women's effectiveness in leadership roles (Figure 1). Again, the combination of male predecessor's legacy and the female successor's insider origins allow the predecessor to engage in the mentoring and endorsing (i.e., an agentic mechanism) behaviors that enable women's success. Furthermore, the local governance structures can enable the agentic mechanism of partnering through the predecessor's

post-succession presence on the board, which allows the predecessor to continue to promote women's success.

Our theorization also proposes that the structural component of gender-inclusive gatekeeping has two facets: role imprints and inclusive organizational practices. Our theorizing about role imprints builds on past research that has pointed to the lack of the successor's fit with the expectations set by the predecessor as an antecedent of turnover from the role (Beckman & Burton, 2007). Whereas past research has viewed these imprints as constraints on incumbents, we propose that the predecessors' imprints on the role can also be beneficial for women successors. In particular, our findings suggest that when women fit the "local" expectations set by their male predecessors in terms of their functional background and on other dimensions, their lack of fit with the "global" maletyped leadership schemas appeared to be less salient in the eyes of key organizational stakeholders. Moreover, our finding that "power imprints" matter to the effectiveness of women successors has important implications for future research: it suggests that researchers need to look beyond task and functional role imprints to other facets of the role that may set the local expectations associated with that particular role and thus become critical for the success of incoming executives.

Finally, although our theorizing focuses on women's success in the upper echelons, our findings underscore the inherently gendered nature of this rarefied context and behoove future research to further problematize men's roles as leaders. Consider that the conditions that enabled women's success – insiderness and predecessors' long-tenures and involvement in post-succession governance – did not enable men's success. We suggest that researchers apply a critical lens on men's roles such as the 'precarious

manhood theory' which suggests that, like women, men also attempt to subscribe to socially constructed notions of 'being male' with implications for their success (failure) in leadership roles. Through this lens, which views "manhood" as a status that is both "hard won and easily lost", research could frame leadership transition events in masculine settings as arenas for one-upping and dominance displays that can shape outcomes for successors (Schrock & Schwalbe, 2009; Vandello & Bosson, 2013). In the context of the upper echelons, this theory would suggest that the (mostly) male predecessors' agentic pre-succession endorsing and post-succession partnering with an incoming male successor might appear to be an affront to the male successor's efforts to establish dominance—and explain why insider males failed under the same conditions in which female insiders succeeded (e.g., the 'turning around the legacy' recipe). In line with this thinking, we attribute the one-upping mechanism as a possible explanation for a crucial ingredient we found for men's success: being an outsider. As previous executive succession literature suggests, the outsider status of a successor inherently carries expectations for and represents organizational change. It provides the male successor an opportunity to readily distinguish himself from his male predecessor and allows him to don a dominant leader persona. This provides an explanation for why, somewhat surprisingly, even when the inherited predecessor legacy conditions are favorable — a situation conventionally thought to call for insiders – we found that male *outsiders* are more successful. Future research into the consequences of subscribing to male-typed leader schemas to explain variability among males in leadership roles is clearly warranted.

Overall, our study represents an important next step in the development of an actionable theory of women's success in top leadership roles by shedding new light on how local firm histories and complexities shape the conditions that enable genderinclusive gatekeeping by key organizational agents such as predecessors. Indeed, our study is among the first to highlight how various aspects of the firm context combine to determine variability *among* women executives. This approach is a substantive departure from past research that has primarily drawn from role congruity theory or implicit theories of leadership to explain performance differences yielding mixed findings (e.g., Hoobler, et al., 2016). These past approaches emphasize sex differences in leadership effectiveness, and while analytically expedient, these predominantly regression-based approaches have severely limited researchers' prowess to detect and fully unpack gender effects when, in fact, gender may have many complex implications in the upper echelons (Ely & Padavic, 2007; Martin, 1994). Given the steady rise of women to the highest levels in firms, our study suggests an urgent need to continue to test the boundary conditions of past theoretical frameworks in the domain of executive successions and the upper echelons context more broadly. We propose that future research in this domain explicitly recognize that these frameworks have been developed based on overwhelmingly male samples and may not be transferable to women who are more likely to occupy CEO roles in the future (Strategy&, 2013).

Conclusion

In conclusion, our study focuses attention on how organizational agents and local contexts jointly create the conditions for gender-inclusive gatekeeping that enables women's success in a setting where they have been historically underrepresented. Based

on detailed case analyses of all CEO succession events involving women in large US firms over two decades, our findings show the conditions under which (mostly male) predecessor CEOs can be a formidable force that facilitates women CEOs' subsequent success. Based on the findings, we theorize that not all predecessors are gender inclusive: gender-inclusive gatekeeping by male predecessors occurs only when a confluence of local factors enables both agentic and structural mechanisms that mitigate chronic and pervasive sex-role stereotypes and expectations. Broadly speaking, the main implication of our study is that organizational agents—and in particular, male predecessors—can potentially help in altering local contexts to make them more inclusive. To be clear, these findings do not imply that women leaders are reliant solely on male predecessors for their success. To a great extent, their success is obviously a function of their own skills, ability and motivation. The findings do, however, highlight the critical role that male predecessors play in women's transition into leader roles and place these men front and center in a mandate for greater gender inclusion at the highest levels in organizations.

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Table 1
Fuzzy Set Membership Calibrations and Measure Descriptive Statistics

		ruzzy set Membership C		Fuzzy Set Calibrations			leasure Desc	riptives1	
	Attributes	Fuzzy set / Measure	Fully in	Crossover	Fully out	Mean	SD	Max	Min
1.	Predecessor's Pre-Succession	Succession events where the predecessor CEO had a long tenure / number of years the	10 years	3 years	1 year	(F) 9.3	6.9	34	1.0
	Tenure	predecessor CEO served pre-succession	-	•		(M) 8.5	7.5	38	0.25
2.	Predecessor was	Succession events where the predecessor CEO was a founder / predecessors who were	Predecessor is	Predecessor is co- founder/founding	Predecessor	(F) 0.22	0.40	1	0
۷.	Founder ²	founders, co-founders, or founding family	founder	family (0.66)	not founder	(M) 0.21	0.42	1	U
3.	Predecessor	Succession events where the predecessor CEO also served as the chair of the board prior to	Predecessor CEO was		Predecessor CEO was	(F) 0.69	0.46	1	0
٥.	Power ³	succession	chair		not chair	(M) 0.70	0.46	1	Ü
4.	Predecessor's Post-succession	Succession events where the predecessor remains on the board for at least 24 months	Predecessor CEO remains	Predecessor CEO remains as Vice-	Predecessor CEO does	(F) 0.25	0.42	1	0
	Presence on Board ⁴	post succession as chairman, vice-chairman or director	as chair	chair/Director (0.66)	not remain on board	(M) 0.41	0.48		Ů
5.	Successor is	Succession events where the successor CEO was an insider / number of years as an	5 years	2 years	l year	(F) 7.7	8.8	33	0
	Insider	executive of focal firm prior to becoming CEO		,		(M) 5.4	7.6	31	0
6.	Successor	Succession events where the successor CEO was also the chair by the twelfth month of their	Successor		Successor CEO is not	(F) 0.33	0.47	1	0
0.	Power ⁵	post-succession	CEO is chair		chair/	(M) 0.21	0.41	1	O
_	Predecessor poor	Succession events where the predecessor CEO had poor pre-succession performance / 3 year	ROA ≤ Industry	Half way	ROA ≥ Industry Q3	(F) 0.25	0.44		
7.	performance ⁶	pre-succession average firm ROA	Median ROA		ROA	(M) 0.36	0.48		
8.	Predecessor	Succession events where the predecessor CEO was fired/ predecessor was fired or left	Predecessor CEO		Predecessor CEO	(F) 0.16	0.36	1	0
	Fired ⁷	voluntarily (planned retirement; due to health or professional reasons)	dismissed	_	voluntary exit	(M) 0.15	0.36		

¹We include here the measure descriptives for the matched sample of men for comparative purposes.

²Descriptive statistics are the proportion of firms in the sample where predecessor CEOs were founders/founding family.

³Descriptive statistics are the proportion of firms in the sample where predecessor CEOs also served as chair of the board prior to succession.

⁴Descriptive statistics are the proportion of firms in the sample where predecessor CEOs remained on the board post-succession as chairman/vice-chairman/director.

⁵Descriptive statistics are the proportion of firms in the sample where successor CEOs served as chair of the board by the twelfth month post-succession.

⁶Descriptive statistics are the proportion of firms in the sample where predecessor CEO had poor performance.

⁷Descriptive statistics are the proportion of firms in the sample where the predecessor CEO was dismissed.

 Table 2:

 Configurations Sufficient for Women's Post Succession Performance^{a,b,c}

		Panel 1:		Panel 2:			
	High Pe	erformance S	olution	Not High Performance Solution			
	1	2	3	1 a	1b	2	
Predecessor Tenure_or_Founder	•	•	•	•		•	
Predecessor Duality	•	\otimes	•	•	8		
Predecessor Presence on Board	8			\otimes	\otimes	\otimes	
Successor is Insider				\otimes	\otimes	\otimes	
Successor Duality		8	8		8	\otimes	
Successor Inherits Poor Performance	\otimes	\otimes		•			
Raw Coverage	0.18	0.14	0.07	0.18	0.12	0.13	
Unique Coverage	0.18	0.14	0.07	0.09	0.12	0.04	
Consistency	0.78	1.00	0.80	0.82	0.93	0.83	
Number of Cases	12	7	5	8	4	5	
Overall Solution Consistency	0.84			0.85			
Overall Solution Coverage	0.39			0.34			

 $^{^{}a}$ Central conditions are represented by \bigcirc (presence) and \bigcirc (absence); contributing conditions by \bigcirc (presence) and \bigcirc (absence);

^bConfigurations 1a and 1b in Panel 2 are "neutral permutations"; they share the same central conditions but differ in their contributing conditions; ^cActual minimum thresholds used in the analyses, respectively: raw consistency = .77; .77; PRI consistency = .76, .75; a minimum frequency of two cases/configuration was used in both analyses

Table 3:
Configurations Sufficient for Women's High Post-Succession Performance:
The Contingencies of Women on the Board, Male-Dominated Industries, and Firm Size^{a,b,c}

	Panel 1:				Pan	el 2:	Panel 3:			
	Solution Including Women on Board			Solution Including Male Dominated Industry		Solution Including Firm Size				
	1	2 a	2b	3	1	2	1	2	3	4
Predecessor Tenure_or_Founder	•	•	•	•	•		•	•	•	•
Predecessor Duality	•	\otimes	\otimes		•	\otimes	•	•	\otimes	
Predecessor Presence on Board	8		•	8	8		8			\otimes
Successor is Insider								•		
Successor Duality		8	8	8		8		8	8	8
Successor Inherits Poor Performance	⊗	\otimes	\otimes	8	⊗	8	8		\otimes	8
Women Director(s) on Board		•		8						
Male Dominated Industry					•	\otimes				
Firm Size							•	•	8	\otimes
Raw Coverage	0.13	0.05	0.09	0.05	0.13	0.08	0.13	0.03	0.11	0.09
Unique Coverage	0.13	0.02	0.06	0.05	0.13	0.08	0.13	0.03	0.06	0.04
Consistency	0.89	0.96	1.00	0.82	0.83	1.00	0.81	0.92	0.98	0.86
Number of cases	9	4	5	2	7	4	8	2	6	4
Overall Solution Consistency	0.91				0.88		0.87			
Overall Solution Coverage	0.27				0.21		0.32			

 $^{^{}a}$ Central conditions are represented by \bigcirc (presence) and \bigcirc (absence); contributing conditions by \bigcirc (presence) and \bigcirc (absence);

^bConfigurations 2a and 2b in Panel 1 are "neutral permutations"; they share the same central conditions but differ in their contributing conditions; ^cActual minimum thresholds for the analyses, respectively: raw consistency = .82, .83, .78; PRI consistency = .75; .75, .75; minimum frequency of 2 cases/configuration in all three analyses.

Table 4: Configurations Sufficient for Men's Post Succession Performance^{a,b}

		Panel 1:			Pan	el 2:		
	High Pe	erformance S	olution	Not High Performance Solution				
	1	2	3	1	2	3	4	
Predecessor Tenure_or_Founder	•	•	8	•	•	•	•	
Predecessor Duality		•		•	\otimes			
Predecessor Presence on Board		8		8			•	
Successor is Insider	\otimes	\otimes			8			
Successor Duality	8		8		8	8	8	
Successor Inherits Poor Performance	\otimes	\otimes						
Raw Coverage	0.12	0.05	0.16	0.16	0.12	0.12	0.1	
Unique Coverage	0.1	0.05	0.15	0.16	0.12	0.06	0.03	
Consistency	0.8	1.00	0.92	0.77	0.94	0.83	0.84	
Number of Cases	5	2	5	10	7	6	5	
Overall Solution Consistency	0.87			0.85				
Overall Solution Coverage	0.31			0.44				

 $^{^{}a}$ Central conditions are represented by \bigcirc (presence) and \bigotimes (absence); contributing conditions by \bigcirc (presence) and \bigotimes (absence);

^b Actual minimum thresholds used in the analyses, respectively: raw consistency = .77; .76; PRI consistency = .76, .75; a minimum frequency of two cases/configuration was used in both analyses

Table 5:
The Necessity of the Attributes for Post Succession High ROA

	Wome High Perfor		Men High Perfo	
	Consistency	z-score ^a	Consistency	z-score ^a
Predecessor Tenure_or_Founder	0.80	-0.16	0.66	-2.79
Predecessor Duality	0.68	-2.47	0.72	-1.66
Predecessor Presence on Board	0.33	-9.12	0.48	-6.15
Successor is Insider	0.72	-1.70	0.47	-6.34
Successor Duality	0.31	-9.58	0.19	-11.58
Successor Inherited Poor Performance	0.32	-9.38	0.41	-7.46
Predecessor Tenure_or_Founder _or_ Predecessor Presence on Board	0.91	1.95*	0.48	-6.15
Predecessor Tenure_or_Founder _or_ Successor is Insider	0.93	2.33**	0.82	0.21

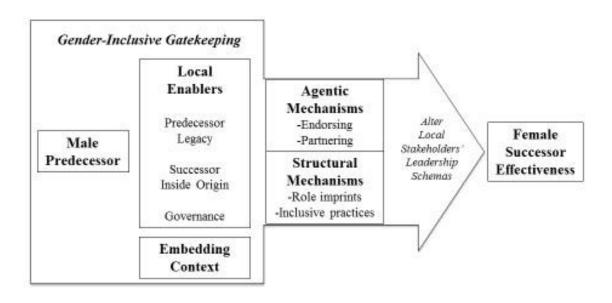
^{*} p<.05, ** p<.01, *** p<.001, one-tailed tests.

$$z = ((CO - CB) - 1/2N) / sqrt((CB*(1-CB))/N)$$

where CO is the observed consistency, CB is the benchmark consistency (here .80), and N is the number of cases with nonzero membership in the set of firms with high firm performance (women, N = 59; men N = 56). Thus, this assesses the difference between the observed consistency and the benchmark consistency relative to the standard error of the benchmark (i.e., the latter is represented by the formula's denominator). The z score can then be evaluated using the standard normal distribution table (and following convention, we use an α of .05 for significance; i.e., $z \ge 1.65$ as a one tailed test is appropriate here). In essence, this use of probabilistic criteria allows for inferences regarding the "quasi-necessity" of the attributes under study (i.e., the particular finding is not due to chance); a .80 benchmark means that the attribute(s) in question is (are) "almost always necessary" for performance (Ragin, 2000: 109).

^aWe assessed whether the observed consistencies are significantly greater than a pre-specified "benchmark" consistency using probabilistic criteria; we used a benchmark of .80. This is accomplished via a z test using the following formula (see Ragin, 2000, pp. 109-115; 227-229):

Figure 1: A Mid-Range Theory of Gender-Inclusive Gatekeeping



Online Supplemental Appendix 1: List of Studied Female CEO Cases

	1	List of Studied Female Ci	Cases	
	CEO FULL NAME	COMPANY NAME	SUCCESSION YEAR	PREDECESSOR NAME
1	Kathy Bronstein	Wet Seal Inc	1992	Ken Chilvers
2	Carol A. Bartz, Ph.D.	Autodesk Inc	1992	Alvar Green
3	M. Christine Jacobs	Theragenics Corp	1993	John V. Herndon
4	Nancy J. Pedot	Gymboree Corp	1994	Don Cohn
5	Maryjo J. Cohen	National Presto Inds Inc	1994	Melvin S. Cohen
6	Katherine M. Hudson	Brady Corp	1994	Paul G. Gengler
7	Gale S. Fitzgerald	Computer Task Group Inc	1994	Davin N. campbell
8	Diana D. Brooks	Sotheby's	1994	Michael Ainslie
9	Dorrit J. Bern	Charming Shoppes Inc	1995	David Wachs
10	Susan E. Engel	Lenox Group Inc	1996	Ed Bazinet
11	Betty C. Alewine	Comsat Corp	1996	Bruce Crockett
12	Babette E. Heimbuch	Firstfed Financial Corp/Ca	1997	William S. Mortensen
13	Johnnie Cordell Breed	Breed Technologies Inc	1997	Allen Breed
14	Claire C. Skinner	All American Group Inc	1997	Tom Corson
15	Jill E. Barad	Mattel Inc	1997	John W. Amerman
16	Crandall Close Bowles	Springs Industries	1998	Mr. Walter Y. Elisha
17	Patricia L. Moss	Cascade Bancorp	1998	Roger J. Shields
18	Margaret C. Whitman	Ebay Inc	1998	Pierre Omidyer
19	Andrea Jung	Avon Products	1999	James E. Preston
20	Carleton S. Fiorina	Hewlett-Packard Co	1999	Lewis E. Platt
21	Debra A. Cafaro, J.D.	Ventas Inc	1999	W. Bruce Lunsford
22	Peggy Y. Fowler	Portland General Electric	2000	Ken L. Harrison
23	Kathleen Mason	Tuesday Morning Corp	2000	Jerry M. Smith
24	Paula Rosput Reynolds	Agl Resources Inc	2000	Walter M. Higgins
25	Beatriz V. Infante	Aspect Communications Corp	2000	James R.Carreker
26	Ingrid Wiik	Alpharma Inc	2000	Gert W. Munthe
27	Elizabeth McLaughlin	Hot Topic Inc	2000	Orv Madden
28	Carmie Mehrlander	Bombay Co Inc	2000	Robert S. Jackson
29	Linda Huett	Weight Watchers Intl Inc	2000	William C. Springer
30	Cinda A. Hallman	Sfn Group Inc	2001	Raymond Marcy
31	Elizabeth A. Fetter	Qrs Corp	2001	John Simon
32	Pamela Forbes Lieberman	Truserv	2001	Donald Hoye
33	Anne M. Mulcahy	Xerox Corp	2001	Paul A. Allaire
34	Pamela J. Kirby	Quintiles Transnational Corp	2001	Dennis Gillings
35	Elizabeth H. Davila	VISX Inc/De	2001	Mark B. Logan
36	Marti Morfitt	CNS Inc	2001	Daniel E. Cohen
37	Mary E. Junck	Lee Enterprises Inc	2001	Richard D. Gottlieb
38	Julia A. Stewart	Dineequity Inc	2002	Richard K. Herzer
39	Shirley Singleton	Edgewater Technology Inc	2002	Clete Brewer
40	Marla L. Schaefer	Claire's Stores Inc	2002	Rowland Schaefer

41	Patricia F. Russo	Lucent Technologies Inc	2002	Henry Schacht
42	Mary L. Forte	Zale Corp	2002	Robert J. DiNicola
43	Carolyn J. Logan	Salix Pharmaceuticals Ltd	2002	Robert P. Ruscher
44	Mary G. Puma	Axcelis Technologies Inc	2002	Brian R. Bachman
45	Eileen Scott	Pathmark Stores	2002	James L. Donald
46	Stephanie Streeter	Banta	2002	Donald D. Belcher
47	Kathleen Ligocki	Tower Automotive Inc	2003	Dugald Campbell
48	Kimberly J. McWaters	Universal Technical Inst	2003	Robert D. Hartman
49	Stephanie G. DiMarco	Advent Software Inc	2003	Peter Caswell
50	Mary F. Sammons	Rite Aid Corp	2003	Bob Miller
51	Dona Davis Young	Phoenix Companies	2003	Robert W. Fiondella
52	Mary Agnes Wilderotter	Frontier Communications Corp	2004	Leonard Tow
53	Janet L. Robinson	New York Times Co	2004	Russell T. Lewis
54	Sandra Brophy Cochran	Books-A-Million Inc	2004	Clyde B. Anderson
55	Susan M. Cameron	Reynolds American Inc	2004	Andrew J. Schindler
56	Constance B. Moore	BRE Properties Inc	2005	Frank McDowell
57	Susan R. Salka	AMN Healthcare Services Inc	2005	Steven C. Francis
58	Jane F. Aggers	Hancock Fabrics Inc	2005	Larry G.Kirk
59	Linda A. Lang	Jack In The Box Inc	2005	Robert J. Nugent
60	Brenda C. Barnes	Hillshire Brands Co	2005	C. Steven McMillan
61	Irene B. Rosenfeld	Kraft Foods Inc	2006	Roger K. Deromedi
62	Patricia A. Woertz	Archer-Daniels-Midland Co	2006	G. Allen Andreas
63	Indra K. Nooyi	Pepsico Inc	2006	Steven S. Reinemund
64	Catherine M. Burzik	Kinetic Concepts Inc	2006	Denny Ware
65	Anne L. Stevens	Carpenter Technology Corp	2006	Robert J. Torcolini
66	Constance H. Lau	Hawaiian Electric Inds	2006	Robert F. Clarke
67	Kerrii B. Anderson, CPA	Wendy's International Inc	2006	Jack Schuessler
68	Min J. Kim	BBCN Bancorp Inc	2006	Ho Yang
69	Kathryn V. Marinello	Ceridian Corp	2006	Ronald L. Turner
70	Dawne S. Hickton, Esq.	RTI Intl Metals Inc	2007	Timothy G.Rupert
71	Cindy B. Taylor	Oil States Intl Inc	2007	Douglas E. Swanson
72	Sylvia Summers Couder	Trident Microsystems Inc	2007	Frank Lin
73	Dunia A. Shive	Belo Corp	2007	Robert W. Decherd
74	Lorna E. Nagler	Christopher & Banks Corp	2007	Joseph E. Pennington
75	Carol M. Meyrowitz	TJX Companies Inc	2007	Bernard Cammarata
76	Angela F. Braly	Wellpoint Inc	2007	Larry C.Glasscock
77	Wendy L. Simpson	Ltc Properties Inc	2007	Andre C. Dimitriads
78	Lynn Laverty Elsenhans	Sunoco Inc	2008	John G.Drosdick
79	Mindy F. Grossman	HSN Inc	2008	Tom McInerney
80	Christine King	Standard Microsystems Corp	2008	Steven J. Bilodeau
81	Tamara L. Lundgren	Schnitzer Steel Industries	2008	John D. Carter
82	Ellen J. Kullman	Du Pont (E I) De Nemours	2009	Charles Holliday
83	Ursula M. Burns	Xerox Corp	2009	Anne M. Mulcahy
84	Laura J. Sen	BJ's Wholesale Club Inc	2009	Herb Zarkin

Online Supplemental Appendix 2 Diversity Analysis of Female Cases

We investigated the configurations that were not sufficient for high performance through the use of a diversity analysis (e.g., see Greckhamer et al., 2008). This analysis allowed us to both incorporate all of the cases into our findings and to explore whether there are additional potential patterns for success. Table 6 shows the truth table of the configurations of attributes that were populated by the female cases, arranged from the most frequently occurring to the least. In addition to the frequency of cases for each configuration, we also report the number of high and not-high performers for each configuration. As Table 6 shows, the studied cases populated 29 configurations (of the 64 logically possible—see Table 6 footnote), nine of which constitute the sufficiency solutions reported above (i.e., configurations # 1, 3, 4, and 12 and configurations # 7, 11, 13, 14, and 15 of Table 6 constitute the high performance and the not-high solutions, respectively, in Table 2). Six of the 20 non-sufficient configurations involve four or more cases, three involve two cases, and 11 a single case. We focused on the six frequently occurring non-sufficient configurations (i.e., those with ≥ four cases).

Two of the frequently occurring non-sufficient configurations are similar in all but one condition to the 'handing over the legacy' recipe found in the sufficiency analysis. Configuration #2 (Table 6) shows that when a powerful long-tenured predecessor handed power over to an *outsider* female successor, there was only a 50-50 chance of success: three of the six outsiders maintained the high performance. For example, Carol A. Bartz of Autodesk Inc. and Carly Fiorina of Hewlett-Packard Company were high-performing outsider females in such a scenario. Yet, outsider female successors, such as Dorrit J. Bern of Charming Shoppes Inc., were not successful under the same conditions. Configuration #9 (Table 6) further supports the notion that having *power* in this recipe is integral to filling the normative expectations set by the predecessor

having had power: when insider female CEOs followed powerful predecessors but were not also made chairperson, high performance was obtained by three of the four cases.

Configuration #8 in Table 6, shows that being an outsider (rather than an insider) in the 'partnering the legacy' recipe yields equivocal performance results: in these five cases an outsider female successor take over as CEO (but not chair) from a long-tenured (but not powerful) predecessor under positive performance conditions, but only three achieved high performance (and two not-high performance). For example, while CEO Meg Whitman was able to maintain the high performance of Ebay Inc. alongside of founder Pierre Omidyer as Chairman, CEO Kathleen Ligocki of Tower Automotive Inc. was not successful in a similar situation.

Finally, we found that three of the frequently occurring not-sufficient configurations are similar in all but one condition to the 'turning around the legacy' scenario. Two of the three configurations show that when powerful long-tenured predecessors exit the board (configuration # 6, Table 6) or when not powerful long-tenured predecessors do not stay on the board (configuration # 10, Table 6) in a turnaround situation, success and failure were just as likely (two of five cases were high performers in configuration #6; two of four were high performers in configuration # 10). For example—Nancy J. Pedot of Gymboree Corp. and Janet L. Robinson of the New York Times Company were both insider female CEOs who inherited unfavorable performance conditions from relatively long-tenured predecessors—Don Cohn and Russell T. Lewis, respectively—neither of whom stayed on the board post-succession. Yet, while Nancy Pedot was successful in turning Gymboree around, Janet Robinson was not successful. Interestingly, configuration # 5 in Table 6 also shows that this recipe does not work when the successor inherits favorable performance; only two of the five female insiders confronted with this alternative situation maintained the inherited positive performance.

Table 6: Truth Table of Configurations¹

·			11	um rab	ie or Co	nfiguratioi	18*			
						Inherited				Configuration in
Configuration	Predecessor	Predecessor	Predecessor	Successor	Successor	Poor	# of	# of High	# of Not-High	Sufficiency
#	Imprint	Power	POB	Insider	Power	Performance	Cases	Performers	Performers	Solution ²
1	1	1	0	1	1	0	12	12	0	C1, P1, T2
2	1	1	0	0	1	0	6	3	3	
3	1	0	1	1	0	0	5	5	0	C2, P1, T2
4	1	1	1	1	0	1	5	5	0	C3, P1, T2
5	1	1	1	1	0	0	5	2	3	
6	1	1	0	1	0	1	5	2	3	
7	1	1	0	0	1	1	5	0	5	C1a, P2, T2
8	1	0	0	0	0	0	5	3	2	
9	1	1	0	1	0	0	4	3	1	
10	1	0	0	1	0	1	4	2	2	
11	1	1	0	0	0	1	3	0	3	C1a/C2, P2, T2
12	1	0	0	1	0	0	2	2	0	C2, P1, T2
13	1	0	0	0	0	1	2	0	2	C1b, P2, T2
14	0	0	0	0	0	1	2	0	2	C1b, P2, T2
15	1	1	0	0	0	0	2	0	2	C2, P1, T2
16	1	1	1	0	0	1	2	0	2	
17	1	1	0	1	1	1	2	0	2	
18	0	1	1	1	0	0	2	1	1	
19	1	1	1	0	0	0	1	1	0	
20	1	0	0	1	1	1	1	0	1	
21	0	0	1	1	0	1	1	1	0	
22	0	0	1	1	0	0	1	1	0	
23	0	1	0	0	1	1	1	0	1	
24	0	1	0	1	0	1	1	1	0	
25	0	1	0	0	0	1	1	0	1	
26	0	1	0	0	0	0	1	1	0	
27	0	0	0	0	1	1	1	0	1	
28	0	0	0	1	0	1	1	0	1	
29	0	0	0	0	0	0	1	0	1	

¹ Truth tables map the empirically-occurring combinations of attributes among the 2^k logically possible combinations (where k is the number of attributes—in this study there are 2⁶ or 64 logically-possible configurations). Here we only report the 29 configurations that were populated by cases. Membership scores above the crossover point in a given set are indicated by a "one" while "zero" indicates a membership score below the crossover point.

² These configurations (which are also shaded) were part of the sufficiency solutions. For example, configuration #1 here in Table 6 is what makes up configuration 1 (C1) of the high performance solution in panel 1 (P1) of Table 2 (T2).

Online Supplemental Appendix 3: Examination of an Alternative Measure of Female Success: Post-Succession Tenure

Table 7 reports the results of our examination of the sufficiency of the main studied attributes for observing longer post-succession tenures among women CEOs. Four different combinations of these attributes were sufficient for longer tenures. On the one hand, these combinations show the robustness of our performance findings: configuration 1 in Table 7 represents the 'handing over the legacy' recipe, configurations 2a/2b and 4 the 'partnering the legacy' recipe, and configuration 3 represents the 'turning around the legacy' recipe.

On the other hand, the findings with respect to tenure differ in interesting ways that provide even deeper insights into understanding the mechanisms that operate to provide female CEO success. First, configuration 1 shows that the power of also being chairperson of the board becomes the main mechanism in the 'handing over the legacy' recipe when the measure of success is a lasting tenure: the successors' origins and inherited performance are not relevant to tenure. Indeed, our deeper analysis of these cases showed that while the 12 cases that achieved high post-succession firm ROA found in our main sufficiency analysis (configuration 1, panel 1, Table 2) are among the 20 cases found to have long tenures under this scenario, seven outsiders also enjoyed a long tenure when taking the reins from a powerful long-tenured predecessor. Thus, in contrast to our main findings that suggest that mentoring was an integral mechanism to achieving high firm performance in this scenario, it was not so for a lasting tenure. Moreover, only two of the additional eight cases found here had organizational programs of inclusion; this mechanism therefore was also not important for a long post-succession tenure. Furthermore, in four cases (three outsiders, one insider), a long tenure even happened when the female successor inherited poor performance conditions. In short, while having power fulfills normative expectations that help women succeed in this scenario, it evidently also serves as a more direct

influence mechanism that enables female CEOs to maintain their positions even if the firm is performing poorly under their leadership. Avon Chairman and CEO, Andrea Jung is illustrative: Jung became CEO of Avon in 1999 and "was the chairman of a board that loved her". In fact, her power on the board was so great that despite "years of management missteps... the company plung(ing) deeper into crisis", the board of directors remained "complacent" towards her resulting in her long tenure of close to 13 years (Kowitt, 2012).

Configurations 2a-2b and 4 (Table 7) enact the 'partnering the legacy' recipe, and also show that a long post-succession tenure is a more achievable measure of success than is performance under this scenario. Again while the seven cases found to have achieved high firm performance under this scenario in our main analysis (configuration 2, panel 1, Table 2) are among the cases that make up configurations 2a/2b, a total of 24 women under this scenario are considered to be successful as indicated by tenure (five of the 29 cases across configurations 2a and 2b fit both configurations here—as reflected in their lower unique than raw coverages). While all of the female successors in configuration 2a were insiders, seven of the female successors in configuration 2b were outsiders—pre-succession mentoring by the predecessor was not crucial for enjoying longer tenures post succession. The female CEO's ability to work in a post-succession partnership with their male chairman was nevertheless integral to a longer tenure. Ebay CEO Meg Whitman (who worked alongside of founder Chairman Pierre Omidyer throughout her tenure) is an example of an outsider who enjoyed a decade long tenure under this scenario, and achieved high firm performance as well.

Configuration 4 in Table 7 provides a twist to the 'partnering the legacy' recipe: a longer post-succession tenure was enjoyed by an insider female successor who followed a long standing predecessor and then worked in partnership not with the predecessor but with another chair, who

in some cases had a long pre-succession tenure with the firm or was large ownership holder in the firm, regardless of the inherited performance conditions. Indeed, only two of the six cases here inherited favorable performance under this scenario—and these two also appear as part of configurations 2a/2b (Linda Huett of Weight Watchers; Stephanie DiMarco at Advent Software) already discussed above. The other four cases were insider females who inherited poor performance and had longer tenures. An example here is Janet L. Robinson who took on the role of CEO of the New York Times Company in 2004 and then enjoyed a long post-succession tenure alongside of Arthur Sulzberger Jr., chairman of the board since 1997.

Configuration 3 of Table 7 shows that the 'turning around the legacy' recipe also appears, but can happen regardless of the female successors' origins. The five cases found in our main analysis (see configuration 3, panel 1, Table 2) again are also among the seven cases that make up this configuration, but the two additional cases here were outsiders who didn't turn firm performance around in the first three years post succession but did so eventually. Again, while pre-succession mentoring by the predecessors is not crucial for the successors' post-succession tenure, serving as the protégés to the predecessor-CEOs-as-chairman post-succession enabled these two outsiders to enjoy longer tenures. For example, in a company announcement at the time of his retirement from Ventas, Inc., predecessor Chairman W. Bruce Lunsford described how he partnered with CEO Debra A. Cafaro to "successfully manage the Company through the extreme difficulties that beset the nursing home sector". Cafaro too acknowledged that her predecessor continued to be involved in the day-to-day operations of the firm after her succession as CEO and that he served as "a great resource during my tenure at Ventas as we have re-shaped the Company into a reliable and top performing real estate investment trust" (Adams, 2003).

 $\begin{tabular}{ll} Table 7 \\ Configurations Sufficient for Women's Post-Succession Tenure^{a,b,c} \\ \end{tabular}$

	Women CEO Post-Succession Tenure								
	1	2 a	2b	3	4				
Predecessor Tenure_or_Founder	•				•				
Predecessor Duality	•			•	\otimes				
Predecessor Presence on Board	8		8		8				
Successor is Insider		•							
Successor Duality		8	8	8	8				
Successor Inherits Poor Performance		\otimes	\otimes	•					
Raw Coverage	0.29	0.22	0.18	0.08	0.08				
Unique Coverage	0.29	0.12	0.09	0.08	0.05				
Consistency	0.87	0.94	0.96	0.87	0.95				
Number of Cases	20	16	13	7	6				
Overall Solution Consistency	0.90								
Overall Solution Coverage	0.72								

 $^{^{}a}$ Central conditions are represented by \bigcirc (presence) and \bigotimes (absence); contributing conditions by \bigcirc (presence) and \bigotimes (absence);

^bConfigurations 2a/2b are neutral permutations, respectively; they share the same central conditions but differ in their contributing conditions;

^cActual minimum thresholds for the analysis: raw consistency = .85; PRI consistency = .81; minimum frequency of 2 cases/configuration.

Biographical Sketches

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