Women leaders and firm performance in family businesses: An examination of financial and nonfinancial outcomes

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Abstract

This study examines how the inclusion of women leaders in upper levels of management is associated with organizational performance in family-controlled businesses. Although the idea that gender diversity is beneficial for business has gained popularity, the business case remains equivocal and scholars are being urged to offer renewed and more nuanced support for when and how women in senior leadership roles may affect organizational outcomes. In response to these calls, we distinguish between financial and nonfinancial performance outcomes, comparing family and nonfamily businesses. Based on a framework that combines the upper echelon and double standards of competence theories, we examine the relationship between female leadership and firm performance, using panel data of large public firms from the S&P 500 over a five-year period. Our findings indicate that female-led organizations (i.e., those with a female CEO and/or CFO) outperform male-led organizations in terms of nonfinancial performance across family and nonfamily businesses. However, in financial terms, we find a statistically significant and positive relationship between female leaders and firm performance only in nonfamily businesses. Our main theoretical contribution is to suggest that the upper echelon and double standards of competence theories may not apply in family businesses in the same way as they do in nonfamily businesses, due to limitations to managerial discretion in the former. Our study has implications for practitioners, especially for owners of and advisors to family businesses.

Keywords: Female leadership, Gender diversity, Family business, Financial performance, Nonfinancial performance

1. Introduction

Although scholars are increasingly paying attention to the distinct environment of family businesses for women's involvement (e.g., Amore, Garofalo, & Minichilli, 2014; Jimenez, 2009; Nekhili, Chakroun, & Chtioui, 2016; Nelson & Constantinidis, 2017), the study of female leadership in the family business literature is still relatively undeveloped as indicated by recent reviews of the literature (Campopiano, De Massis, Rinaldi, & Sciascia, 2017; Nelson & Constantinidis, 2017). The dearth of research reflects the fact that women are underrepresented in senior leadership roles and often have limited roles in the family business, compared to men. Only 42% of women working in a family business are major decision makers and 47% get paid for their work (Danes & Olson, 2003). Male successors are still preferred over females as CEOs (Ahrens, Landmann, & Woywode, 2015). Women in family businesses have been labeled as invisible (Curimbaba, 2002; Gillis-Donovan & Moynihan-Bradt, 1990) as their role is often limited to providing behind-the-scenes emotional leadership (Jimenez, 2009). At the same time, however, women are more likely to work in family businesses as compared to nonfamily businesses, and are more likely to be paid and have a formal role if they are also one of the owners in the family business (Danes & Olson, 2003). Furthermore, family businesses tend to incorporate women more rapidly into leadership roles (Barrett & Moores, 2009). Family ownership has been found to be positively associated with women in top management teams (TMTs), whether they belong to the family or not (Montemerlo, Minichilli, & Corbetta, 2013), and most women who become chief executives do so in their family business (alternatively they do so in the business they have started) (Adler, 1997). In fact, a report by consulting firm Ernst and Young (2015) indicates that women are represented in 22% of family business TMTs, 55% of family businesses have at least a woman on their board, and 70% of family businesses are

considering a woman for their next CEO, with 30% strongly considering a woman for the top spot. These numbers are higher than for nonfamily businesses throughout. Based on this varied literature, therefore, it appears that women are generally underrepresented as senior leaders compared to men in family businesses, but less so than in nonfamily businesses. Put differently, it appears family businesses create a more favorable environment for women as leaders compared to nonfamily businesses.

While the limited participation of half the population in senior leadership due to gender is considered unacceptable from an ethical standpoint, this underrepresentation of female leaders also poses challenges to organizational performance (Dezso & Ross, 2012). Diversity scholars argue that increasing female presence in male-dominated leadership teams creates a strategic advantage that can promote more efficient practices overall (De Dreu & West, 2001; Jehn, Northcraft, & Neale, 1999; van Knippenberg, De Dreu, & Homan, 2004). Research also suggests there is a potential 'female advantage' (Paustian-Underdahl, Walker, & Woehr, 2014), according to which female leaders engage in a leadership style that is more compatible with the needs of modern organizations (Eagly & Carli, 2003; Koenig, Eagly, Mitchell, & Ristikari, 2011). This business case for women in leadership has gained popularity as a way to fuel gender equality efforts and to encourage key decision makers to prioritize the inclusion of more women in leadership (Hoobler, Masterson, Nkomo, & Michel, 2018; Klettner, Clarke, & Boersma, 2016). Despite its intuitive appeal, however, the business case for female leadership remains equivocal (Hoobler et al., 2018). There is some evidence pointing towards a negative relationship, with female managers being associated with lower family business income (Olson et al., 2003) and family businesses owned by females achieving lower revenue than those owned by males (Danes, Stafford, & Loy, 2007). However, there is also support for a positive correlation between female CEOs and family business performance, especially if there are other women on TMTs/boards of directors (Amore et al., 2014; Montemerlo et al., 2013).

In light of these ambiguous findings, Hoobler et al. (2018) recently conducted a metaanalysis and critique of the business case for women in leadership in which they argue that the
time is ripe for a more refined investigation into the role of female leaders for their
organizations' performance. In particular, they recommend taking a closer look at socialcontextual factors that can help us understand the mechanisms underlying the impact of female
leaders as well as using alternative conceptualizations and measures of the value that women
bring to the business. In short, it is critical for family business scholars to engage in an updated
research approach that helps us better understand what role gender plays for leaders in TMTs and
how we can support family businesses to benefit from the presence of women in such influential
teams.

Based on the above-mentioned concerns, our research differs from and contributes to prior work in three important ways. First, we respond to Hoobler et al.'s (2018) call for further exploration of social-contextual factors that can shed light on the relationship between gender diversity in TMTs and their performance (Hoobler et al., 2018; Jeong & Harrison, 2017; Schyns & Meindl, 2005; van Knippenberg & Schippers, 2007). In particular, we study female leadership by looking at women's role in senior leadership positions in family businesses compared to nonfamily businesses. Family businesses are defined as organizations in which family members significantly influence not only the creation of the business but also its financial and strategic management (Aldrich & Cliff, 2003; James, Jennings, & Breitkreuz, 2012). They are the predominant form of organization worldwide, accounting for around 80% of operating firms in

the US (Chua, Chrisman, & Chang, 2004) and a third of the largest 500 companies in the US by market capitalization (Anderson & Reeb, 2003).

Second, we respond to calls for family business research to go beyond the most commonly used theories, i.e. agency and stewardship theory (Pieper, 2010), by integrating theories from gender diversity and social psychology (double standard theory; see Foschi, 2000) with a mainstream, management theoretical lens (upper echelon theory; see Hambrick, 2007). Third, we address the need for alternative measures of organizational performance by considering nonfinancial – i.e., social, governance, and environmental – performance in addition to the normative financial organizational performance. Organizations are increasingly held accountable to stakeholders in the broader society who expect them to engage in more sustainable business practices (Stahl & De Luque, 2014; Wiengarten, Lo, & Lam, 2015). As such, the 'triple bottom line' (financial, social, and environmental) is gaining acceptance across industries and this trend requires an expanded view of what organizational performance entails (Hoobler et al., 2018). Family businesses are especially relevant for studies of nonfinancial performance because of the implications of family involvement for organizational behaviors, ethical values, and performance (Anderson & Reeb, 2003; Dyer, 2006; Miller, Minichilli, & Corbetta, 2013). Furthermore, prior work on the performance outcomes of female leadership has been criticized for ignoring the "complexities of the socialized perspective of gender" by only studying financial performance (Danes et al., 2007: 1058). This financial focus may discriminate against women as there is reason to believe that they do not measure success merely through a traditional financial approach (Anna, Chandler, Jansen, & Mero, 2000; Danes et al., 2007). We accordingly include nonfinancial performance as an alternative measure of organizational performance in this study to respond to these concerns.

The rest of the article is structured as follows. First, we develop a theoretical framework to explain how the presence of female leaders at the top of businesses can be associated with financial and nonfinancial organizational performance in family and nonfamily businesses.

Second, we describe our sample as well as the empirical study. Third, we present our results.

Finally, we discuss our findings, indicate limitations of the study to encourage future research, and suggest practical implications and concluding remarks.

2. Theoretical framework

For our theoretical framework we draw on upper echelon theory (Hambrick & Mason, 1984; Hambrick, 2007) and double standards of competence theory (Foschi, 1996, Foschi, 2000; Paustian-Underdahl et al., 2014). Below we present these theories first in general terms and then with reference to family businesses to illustrate how they are relevant to our study. We then distinguish between financial and nonfinancial performance and propose our hypotheses.

2.1. Women in the upper echelons

Upper echelon theory (Hambrick & Mason, 1984; Hambrick, 2007) emphasizes how the cognitive frames of members in TMTs are important determinants of firm outcomes. Cognitive frames are personalized interpretations of circumstances (i.e., information-seeking and information-evaluation processes) that ultimately stem from individuals' experiences, values, and personalities. In the multifaceted and ambiguous context of TMTs, team members' cognitive frames shape their strategic behaviors as a collective by guiding them in what they pay attention to (Hambrick, 2007), making their study critical for a more nuanced understanding of firm performance. Considering the complexities involved in capturing senior leaders' cognitive frames, scholars within this stream of research have successfully used leaders' observable characteristics as proxies of such interpretations and ensuing behaviors (Boeker, 1997; Dezso &

Ross, 2012; Post & Byron, 2015). Underlying this approach is the assumption that leaders' characteristics, such as gender here, will have shaped their experiences and values in ways that influence what information they process and how they process it in their environment.

Upper echelon theory posits that female leaders bring with them unique cognitive frames to male dominated TMTs, as they are likely to have faced different experiences in both their personal and professional lives compared to their male counterparts (Post & Byron, 2015). A common depiction of the difference between men and women that stems from these different experiences concerns their self-construal: women are considered to have a more relational, connected, and interdependent self-construal than men who instead have a more independent self-construal (Gabriel & Gardner, 1999). Women's relational self-construal has been credited for generating empathetic behaviors and priorities in general and as leaders in particular (Post, 2015). Indeed, scholars have found evidence for women's use of a more collaborative and empowering leadership style that involves being communicative with and supportive of their employees, taking other people's point of view into consideration when planning, and focusing less on exerting power and dominance as is more typically associated with male leaders (Eagly & Johannesen-Schmidt, 2001; Eagly, Johannesen-Schmidt, & Van Engen, 2003; Koenig et al., 2011; Lauterbach & Weiner, 1996; Paustian-Underdahl et al., 2014). This literature illustrates how women tend to interpret their leadership role differently than men in terms of how they can best influence their employees and organizations overall.

In light of this evidence, upper echelon theory expects the presence of women in male dominated TMTs to generate increased cognitive diversity that can have positive effects on firm performance (Carpenter, Geletkanycz, & Sanders, 2004; Hambrick & Mason, 1984). Diversity scholars support this view by illustrating how gender diverse teams can benefit their

organizations when ideas stemming from employees' gender differences produce higher levels of innovation, decision-making quality, and effectiveness overall (De Dreu & West, 2001; Jehn et al., 1999; van Knippenberg et al., 2004).

Despite this potential, however, many gender diverse teams fail to capitalize on their members' informational differences and instead see an escalation of negative interpersonal relationships (i.e., social categorization effects; Williams & O'Reilly, 1998; see also Chatman & Flynn, 2001; Randel, 2002; Schwab, Werbel, Hofmann, & Henriques, 2016). Indeed, gender diversity has been labeled a double edged sword in that it can elicit both positive and negative performance effects (van Knippenberg, Dawson, West, & Homan, 2011). Diversity can become dysfunctional for team performance if employees distance themselves from those who are dissimilar from themselves; a situation that is particularly likely when the dissimilar others appear to be of low fit compared to the rest of the team (van Knippenberg & Schippers, 2007; van Knippenberg et al., 2004). For the sake of gender diversity in leadership teams, women are typically in a minority and may face common stereotypes that view the female gender as being incompatible with senior leadership (Eagly & Karau, 2002), a perception that is reinforced by the lack of critical mass of women in senior positions (Mackey, Roth, Van Iddekinge, & McFarland, 2017). As such, the presence of women in leadership teams may not have positive performance implications if the rest of the team excludes rather than includes the female members and their contribution. While female leaders face this form of marginalization at all levels of organizations, whereby their teams miss out on the benefits of gender diversity, we draw from the double standards of competence model (Foschi, 1996, Foschi, 2000) to illustrate why this is less likely to be the case in TMTs today.

2.2. The impact of double standards

Recent work on the effectiveness of female leaders suggests the time is ripe for challenging some of the traditional theories of women's impact in the workforce, at least at the upper echelons of organizations (Paustian-Underdahl et al., 2014). While prior work and theory have proposed an incongruity between women and their role as leaders (Eagly & Karau, 2002; Heilman, 2001), new investigations into the double standards of competence indicate that women in senior leadership positions may actually be perceived as being more rather than less congruous with effective leadership qualities (Paustian-Underdahl et al., 2014; Rosette & Tost, 2010). The double standards of competence model (Foschi, 1996, Foschi, 2000) illustrates how stricter requirements tend to be applied to individuals of 'lower status', such as women here. A double standard for evaluating leadership occurs in organizations when women are expected to show more convincing evidence of leadership qualities than men to gain credibility as effective leaders (Lyness & Thompson, 2000). Women's potential for pursuing leadership roles is seriously hampered on account of these double standards, as has been depicted in numerous articles on the many barriers female leaders face (Heilman, 2001; Hoobler, Lemmon, & Wayne, 2014; Lyness & Thompson, 2000). If women make it to the top of organizations despite these hurdles, however, the double standard of competence instead provides them with an advantage in making them appear as having extra competence. Put differently, female leaders who are able to successfully perform in the most senior leadership positions are viewed as being especially competent and resilient in light of the challenges they have had to overcome to get to the top of their organization (Foschi, 2000; Paustian-Underdahl et al., 2014). Based on this theory, therefore, women in TMTs are especially likely to be positively evaluated as having extra competence, which encourages the rest of the team to perceive and manage gender diversity in constructive ways, helping the insights of women to be included in the strategic dialogue.

2.3. Upper echelons and double standards in family businesses

Family businesses are an idiosyncratic organizational form in which family involvement produces distinct behaviors (Chrisman, Chua, & Sharma, 2005) and affects strategy and its implementation (Astrachan, 2010; Brunninge, Nordqvist, & Wiklund, 2007). Indeed, family influence is what makes a family business distinct from a nonfamily one (Chrisman et al., 2005). This holds true not only in private firms but also in large, public family businesses, where ownership is dispersed and the CEO is generally not a family member, made possible through mechanisms such as dual class shares with differential voting rights (giving the family greater voting power than other shareholders), pyramids, crossholdings, voting agreements among shareholders, or disproportionate board representation (granting the family control of the board of directors in excess of voting control). These mechanisms allow the family to influence the firm's management and strategic direction (Villalonga & Amit, 2006; 2009). This suggests that, in family businesses, senior executives may have less managerial discretion (Zahra, 2005), not only in private firms where the family is not subject to external scrutiny (De Massis, Kotlar, Campopiano, & Cassia, 2013), but also in larger, public firms (Villalonga & Amit, 2006; 2009).

At the same time, upper echelons theory offers the caveat that senior leaders are less influential for organizational outcomes when they do not have complete discretion or latitude of action (Finkelstein & Hambrick, 1990; Hambrick & Finkelstein, 1987). That is, if the organizational context does not allow or empower its executives to create change, these leaders will be less likely to influence firm performance. Supporting these theoretical claims, recent meta-analytical evidence on female leadership indicates that female representation in the upper echelons has a stronger, positive effect on long-term financial performance in environmental contexts where executives have greater managerial discretion (Jeong & Harrison, 2017). Based

on these arguments, we expect upper echelon theory to be subdued in a family business where the family exerts control that reduces senior executives' managerial discretion (Zahra, 2005).

We also expect the double standards of competence model to be weaker in a family business because, as illustrated above, family businesses are typically more accepting of women in senior roles. Family businesses generally have a long term orientation in their strategy (Zellweger, 2007) and therefore rely more than other organizations on developing and advancing current employees, creating a context that generally allows women to rise to the top (Goodman, Fields, & Blum, 2003). In particular, family businesses tend to develop business strategies that are sustainable across generations (Habbershon & Pistrui, 2002) and this pushes families to encourage cohesiveness, inclusiveness, and commitment to the business as well as to the family (Lansberg & Astrachan, 1994), contributing to "the erosion of conscious and unconscious bias, making space for women at the top" (Ernst & Young, 2015: 3). Because family businesses already have more women in senior roles than nonfamily businesses, this in turn creates a virtuous cycle as these women become role models for younger ones (Ernst & Young, 2015). In other words, women who make it to the top of family businesses are not as unusual in those positions as they are in nonfamily businesses.

In summary, both the upper echelon theory and the double standards of competence model are expected to have less of an impact in family businesses compared to nonfamily businesses. We elaborate upon this argument as we develop hypotheses about the relationship between female leadership and firm performance in family and nonfamily businesses next.

2.4. Female leadership and firm financial performance

Based on the theories of upper echelons and double standards of competence described above, in general we expect the presence of women in TMTs to be positively associated with firm

financial performance. When a woman becomes a member and rises to the top of a male dominated TMT, she increases the cognitive diversity of the team by offering new experiences, insights, and knowledge unique to her gender that enable the team to have deeper and more encompassing discussions about the strategies of the firm. Increased information elaboration benefits team performance as it allows team members to utilize and integrate their different perspectives and informational resources necessary to make more creative and higher quality decisions (Homan, Van Knippenberg, Van Kleef, & De Dreu, 2007; van Knippenberg et al., 2004).

Female leaders' preference for a relational leadership approach can also increase teams' overall focus on relationships with internal and external stakeholders that have shown to be advantageous in the current business environment (Krishnan & Park, 2005). For example, female leaders are more likely to offer critical insights into how the organization can make strategic decisions that take into account female stakeholders, including customers and employees (Dezso & Ross, 2012). The use of a more collaborative leadership style also implies women spend more time coaching and developing employees in the organization than men (Eagly et al., 2003; Krishnan & Park, 2005); this can lead to greater development efforts in general and for women in particular, which can increase learning and motivation throughout the organization. Put differently, women in senior positions send a signal that the organization is inclusive and supportive of leadership talent of both genders, which also increases the motivation of minority members toward performing in leadership roles (Daily & Dalton, 2003; Dezso & Ross, 2012). Collectively, this evidence suggests that an increased presence of women in TMTs is positively associated with company financial performance through better decision making by the TMT as well as increased motivation and development support of employees.

Hypothesis 1a. Female representation in senior leadership positions is positively associated with financial firm performance.

We now turn to considering female leadership in family businesses, seeing that socialcontextual factors that are idiosyncratic to this type of organization can help us take a finer grained look at the underlying relationship between female leaders and firm performance (Hoobler et al., 2018). Upper echelon theory suggests that senior leaders are less influential when they do not have complete discretion or latitude of action (Finkelstein & Hambrick, 1990; Hambrick & Finkelstein, 1987). In family businesses, the family exercises its control through management and/or ownership, with family ownership often being associated with superior financial performance (Block, Jaskiewicz, & Miller, 2011; Wagner, Block, Miller, Schwens, & Xi, 2015). This occurs not only in private firms where the family is not subject to external scrutiny (De Massis et al., 2013) but also in large, public family-controlled firms where families can continue exercising their control through certain forms of corporate control (Villalonga & Amit, 2006; 2009). The controlling family typically has lengthy tenure and deep, tacit knowledge of the business, which, combined with transgenerational intention, motivates the family to invest deeply in the long-term financial future of the firm (Le Breton-Miller & Miller, 2006). Therefore economic goals are central, although by no means the only, objectives for controlling families. Thanks to their ownership, "family members enjoy certain control rights over the firm's assets and use these rights to exert influence over decision-making processes in an organization" (Carney, 2005: 251). Even when the business has non-family executives, as is often the case in large public firms, the family still tends to 'personalize' the business and view it as 'their business' (Carney, 2005), also because the family's wealth is often concentrated in the family business (Gomez-Mejia, Makri, & Kintana, 2010). Thus the family's control rights allow it to

intervene in the financial decision making of the firm, exerting influence that goes beyond what its equity ownership would indicate, curtailing non-family managers' freedom to exercise their authority (Carney, 2005).

Based on these arguments, we expect upper echelon theory to be subdued in a family business, meaning that TMTs with female leaders will be less likely to be associated with the above-mentioned positive performance implications for their organizations. Similarly, we expect the double standards of competence model also to be weaker in a family business. Research indicates that family ownership is positively associated with women in TMTs (Montemerlo et al., 2013), and as a result, female leaders are more common in senior positions in family businesses making them appear less 'unusual' than female leaders in nonfamily businesses. The double standards of competence model (2000, Foschi, 1996) suggests that women have additional hurdles to overcome to make it to the top of an organization due to stricter requirements being applied to them; this helps to explain the dearth of women in senior leadership roles. However, in organizations that are more inclusive and supportive of women leaders – as in the case of family businesses– this double standard appears less present, reducing perceptions of extra competence for women in family businesses compared to nonfamily businesses. Therefore, we expect the positive relationship between female representation in senior leadership positions and firm financial performance to be moderated by the organizational form being a family business or not. More specifically, we expect the positive association between female leadership and financial performance to be less evident in family businesses compared to nonfamily businesses.

Hypothesis 1b: The positive relationship between female representation in senior leadership positions and financial performance is weaker in family businesses than in nonfamily businesses.

2.5. Female leadership and firm nonfinancial performance

While most prior studies on the impact of female leadership have focused on financial performance (Dezso & Ross, 2012; Kolev, 2012; Peni, 2014; Post & Byron, 2015), we consider nonfinancial performance as an alternative, and complementary, way to measure firm performance. Nonfinancial performance has gained attention in line with increased expectations and even requirements of organizations to find sustainable ways to conduct business (Stahl & De Luque, 2014). Nonfinancial performance is often referred to in the literature as the outcome of corporate social responsibility (CSR) actions aimed at engaging with the goals of certain stakeholder groups, such as employees, suppliers, the local community, non-governmental organizations, or society more broadly (Waldman & Siegel, 2008). This type of organizational performance can be measured with environmental, governance, and social indicators including pollution prevention practices, board accountability, and community relations, respectively (Harrison & Freeman, 1999; Walls, Berrone, & Phan, 2012). These nonfinancial indicators are increasingly being recognized as critical determinants of firm performance in that they contribute to the creation of more sustainable growth and long-term value for shareholders (Laszlo, 2003).

Despite these trends, prior work on the influence of female leadership on organizational performance assumes financial performance as the standard, thereby ignoring the "complexities of the socialized perspective of gender" (Danes et al., 2007: 1058). Women may measure success in a different way from the traditional financial approach (Anna et al., 2000) and this in fact may explain why a "female underperformance theme has surfaced in the literature" (Danes et al.,

2007: 1059). As emphasized above, women tend to manage business resources differently than men, viewing resources in a deeper and more personal way (Bird & Brush, 2002). This type of meaningful connection in turn drives female leaders to engage in more long-term and empathetic behaviors toward their employees and other individuals in their community. We argue that these behaviors are likely to influence nonfinancial performance such as social, governance, and environmental outcomes in organizations. Supporting this view, female CEOs are more likely than their male counterparts to make socially responsible investments (Borghesi, Houston, & Naranjo, 2014). Research also suggests that women tend to adopt stricter ethical guidelines (Lund, 2008) such that female CEOs are associated with increased integrity in financial reporting (Ho, Li, Tam, & Zhang, 2015). Research on corporate governance similarly reveals how the increased presence of women on boards increases organizational efforts toward monitoring and equitable behaviors overall (e.g., compensation and participation; Adams & Ferreira, 2009). Based on these arguments, we expect female leaders to prioritize nonfinancial performance more so than men, leading us to expect a positive relationship between the presence of female leaders in TMTs and the firm's emphasis on nonfinancial performance outcomes.

Hypothesis 2a: Female representation in senior leadership positions is positively associated with nonfinancial firm performance.

Non-economic objectives are a key priority in family businesses, where the controlling family often focuses strategic decision making not only on financial matters but also on the preservation of their legacy and socioemotional wealth, i.e. nonfinancial aspects that meet the family's affective needs, including its identity, influence, and long-term preservation (Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007). In family-controlled businesses the family exercises its control through management and/or ownership, with family

CEOs for example focusing on CSR concerns (Block & Wagner, 2014). Family businesses tend to show higher levels of CSR, better community citizenship, and stronger commitment to philanthropic activities than nonfamily businesses (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010; Deniz & Suarez, 2005; Dyer & Whetten, 2006; Gomez-Mejia, Cruz, Berrone, & De Castro, 2011), particularly when these organizations have strong corporate governance (McGuire, Dow, & Ibrahim, 2012). Because they are embedded in their local community, family businesses are environmentally responsible as they believe that the gains in social legitimacy will offset the cost and uncertainty linked to environmentally-friendly policies (Berrone et al., 2010; Cennamo, Berrone, Cruz, & Gomez-Mejia, 2012). Similarly to financial performance, the controlling family's strong strategic focus on noneconomic objectives is likely to weaken the potential benefits deriving from the decision making of senior leaders in the TMT because, thanks to its relatively strong ownership position, the controlling family can exercise more unrestricted control or discretion (Anderson & Reeb, 2003). Thus the TMT's managerial discretion will be reduced as the controlling family's strategic direction curtails the TMT's ability to "envision" and "create multiple courses of action" (Hambrick & Finkelstein, 1987). Following the arguments presented above about a weakening effect of upper echelon theory and the double standards of competence model in family businesses, we expect the positive relationship between female representation in senior leadership positions and firm nonfinancial performance to be moderated by the organizational form being a family business or not. More specifically, we expect the positive association between female leadership and nonfinancial firm performance to be less evident in family businesses compared to nonfamily businesses.

Hypothesis 2b: The positive relationship between female representation in senior leadership positions and nonfinancial performance is weaker in family businesses than in nonfamily businesses.

We present an illustration of our conceptual model in Fig. 1.

3. Method

3.1. Sample

Our sample consists of all S&P 500 firms, which we followed for a period of five years (2009–2013). The data were put together from three main data sources. First, firm financial data were obtained from the S&P's Compustat database. Second, nonfinancial performance data were obtained from Sustainalytics (Auer, 2014; Wolf, 2014), a research company that has been collecting environmental, social, and governance data since 1992 based on publicly available corporate documents (e.g., corporate websites, SEC filings, annual reports, and sustainability reports), media and news sources (local and global media sources as well as third party sources including NGO reports and human rights watch reports), and company feedback. Third, information on senior leadership and TMT size was acquired from Compustat ExecuComp, which tracks executives, including their gender, position, and compensation. After accounting for missing data, our final sample consists of 1768 firm year observations.

Because the study of the relationship between female leadership and performance in family businesses is still in its infancy, we felt our initial examination would benefit from a simple family or nonfamily business distinction1. We define a family business according to prevailing literature (Chrisman, Chua, & Sharma, 1999; Sharma, Chrisman, & Chua, 1997) as a business that is governed, managed and/or owned by members of the same family and in which one or more members of the family (as owners, officers or directors) hold at least 5% of the

firm's equity (Villalonga & Amit, 2006). In order to identify family businesses we accessed three key sources: proxy statements (Form DEF 14 A), Hoover's Company Records, and company websites. Similar to previous studies, we detected family membership based on last name affinity (Amore et al., 2014) and on information included in proxy statements (indicating family ties). Based on this definition, 22.1% of the firms in our sample are family businesses.

3.2. Measures

3.2.1. Dependent variable

We measure financial performance using an accounting measure, return on assets (ROA), which is an important indicator of firm status and a key measure of operating profitability that is generally used in studies of financial performance (Amore et al., 2014; Anderson & Reeb, 2003; Dezso & Ross, 2012; Post & Byron, 2015). ROA is particularly relevant in this study as it is considered to be more dependent on decisions by the TMT (Firth, Fung, & Rui, 2007). Furthermore, ROA is a commonly used measure of profitability in studies of female leadership in particular, as indicated in the meta-analysis by Hoobler et al. (2018), and thus it is an important measure to use for the sake of consistency and comparison in this area of research.

We measure nonfinancial performance using a 'total difference score', calculated by Sustainalytics, an independent provider of CSR research and ratings (see Auer, 2014; Wolf, 2014). Sustainalytics relies on external sources, i.e. publicly available corporate documents, such as corporate websites, SEC filings, and sustainability reports; media and news sources, including local and global media sources; and third party sources including NGO reports and human rights watch. After collecting this information, and in order to verify it further, Sustainalytics then asks for the company's feedback, typically from the sustainability department. Its research framework analyzes and assesses a company's preparedness (including management systems, policies,

programs and targets, through sources such as health and safety programs, human rights policies, workforce diversity programs, and community relations programs), disclosure (in accordance with industry initiatives and key international norms, through sources such as ILO Conventions, UN Global Compact, CDP (formerly the Carbon Disclosure Project), and Equator Principles) and performance (both quantitative, through indicators such as injury/fatality rates, carbon intensity, or percentage of renewables, and qualitative, through indicators such as a company's involvement in human rights or environmental controversies). Environmental, social, and governance performance indicators are measured yearly and are subdivided into 10 topics, with several core indicators, which are exemplified in Appendix A. To illustrate companies' performance based on these indicators, Sustainalytics first computes an environmental score (obtained as the weighted scores relating to operations, contractors and supply chain, and products and services), a social score (weighted scores relating to employees, contractors and supply chain, customers, society and community, and philanthropy), and a governance score (weighted scores relating to business ethics, corporate governance, and public policy). Second, it calculates a total score for each firm as the sum of the environmental, social, and governance scores. Third, it calculates the difference between the total score for a company and the average score for its peer group (total difference score). Peer groups are defined based on the Global Industry Classification Standard (GICS), an industry classification system developed by S&P. A positive (negative) total difference score indicates that a company performs better (worse) than its peer group in a given year.

Following concerns expressed in prior studies addressing a lack of temporal research limiting our understanding of empirical relationships over time, we adopt a longitudinal approach by introducing a one year time lag in our panel data (Nielsen, Skogstad, Matthiesen, &

Einarsen, 2016; Shamir, 2011) between our measures of the presence of women in top TMT positions and firm performance. This is a frequently used approach to reduce endogeneity concerns with this type of data (Abdullah, Ismail, & Nachum, 2016; Dezso & Ross, 2012). Such endogeneity concerns are further alleviated from a theoretical and empirical standpoint: first, theory on the glass cliff phenomenon indicates that women are more likely to be promoted into leadership during financially challenging times (Ryan & Haslam, 2007) – and the time frame of this study, 2009–2013, includes the aftermath of the 2008 financial crisis – which would imply an opposite relationship to the one hypothesized in our study, i.e. a negative association between female leadership and financial performance; second, prior empirical evidence has ruled out reverse causation regarding the role of female leaders for their firms' performance (see Dezso & Ross, 2012).

3.2.2. Female senior leadership

The most senior leader in an organization is the CEO. However, upper echelon theory (Hambrick, 2007) advocates not to focus on a single individual in order to achieve robust explanations of organizational outcomes, because organizational leadership is typically a shared activity. Therefore in our study we define senior leadership as including the most visible positions of power, i.e. the CEO as well as the Chief Financial Officer (CFO), and we do so for four reasons. First, CFOs are considered to be co-leaders with the CEO (Schulmeyer & Knobl, 2014) and are considered to be "the internal strategic leaders [that are] most directly responsible for a firm's financial health" (Arthaud-Day, Certo, Dalton, & Dalton, 2006, p. 1123). They are as important as CEOs for major decisions, such as those relating to corporate financing or acquisitions (Frank & Goyal, 2007; Huang & Kisgen, 2013). Second, this conceptualization fits with research that emphasizes the need for top leaders to have sufficient authority and power to

be able to influence organizational outcomes (Adams, Almeida, & Ferreira, 2005). Third, our theoretical perspective of double standards of competence should be the strongest when women occupy the most senior positions of the team, making this conceptualization of female leadership most appropriate for testing our hypotheses. Fourth, this conceptualization allows us to make our sample large enough for meaningful analysis (Huang & Kisgen, 2013). Based on these arguments, we operationalized female senior leadership using a dummy variable that takes the value 0 (1) if neither (or at least one) of the CEO and CFO reported in ExecuComp is female in a given year. Women were represented among senior leadership positions in 12% of cases in our sample.

3.2.3. Family business

We operationalized family business/nonfamily business using a dummy variable that takes the value 0 (1) if the organization is not (is) a family business.

3.2.4. Control variables

We controlled for several variables that are typical of studies analyzing the relationship between firm performance and female leadership and that can affect both a firm's performance and the likelihood of women to rise to the top positions (Amore et al., 2014; Dezso & Ross, 2012; Hillman, Shropshire, & Cannella, 2007; van Knippenberg et al., 2011). We controlled for industry, using the two-digit SIC code, because different industries use assets differently.2 Also, women have been shown to have greater influence in creative industries (Dezso & Ross, 2012). We included variables relating to size and age of the organization and its TMT, because larger and/or older organizations may be more likely to have a woman CEO or CFO simply because of their size/age, and because coordination processes become increasingly complex in larger TMTs, negatively influencing performance (Dezso & Ross, 2012). More specifically, we controlled for

firm size, measured by book assets from the prior year; firm age (in years), calculated based on the year the company was listed on Compustat; CapEx intensity, measured as the ratio of capital expenditure to assets from the prior year; and size of management team, measured as number of managers on the TMT. Firm size, firm age, and CapEx intensity were log transformed to reduce skewness (Dezso & Ross, 2012). We included year dummies to control for variation in firm value across years.

4. Results

We tested our hypotheses using OLS regression analysis, controlling for factors that may affect both a firm's performance and its work environment (as described above). We checked for multicollinearity by means of the commonly used Variance Inflation Factor (VIF) statistic; this was not a concern as all values were lower than the suggested cut-off value of 10 (Hair, Rolph, Anderson, Tatham, & Black, 1998). Table 1 provides descriptive statistics for the variables used in the study, including means, standard deviations, and correlations.

In Table 2, Column 1, we report the results of the pooled OLS regression controlling for year fixed effects with financial performance as the dependent variable, measured a year later. The relationship between financial performance and female senior leadership was positive and significant (B = .05, p < .05). Therefore, Hypothesis 1a was supported. In Column 2, we added the interaction effect between family business status and female senior leadership. The interaction was significant and in the expected direction for financial performance (B = -.08, p < .01) illustrating that the positive relationship between the presence of female leaders and organizations' financial performance is weaker in family businesses. Therefore, Hypothesis 1b was supported. In Column 3, we report the results of the pooled OLS regression controlling for year fixed effects with nonfinancial performance as dependent variable, measured a year later.

The relationship between nonfinancial performance and female senior leadership was positive and significant (B = .05, p < .05). Therefore, Hypothesis 2a was supported. In Column 4, we added the interaction effect between family business status and female senior leadership. The interaction between family business status and female senior leadership was not significant for nonfinancial performance (B = .04, n.s.). Therefore, Hypothesis 2b was not supported. The significant interaction is plotted in Fig. 2 on the basis of the recommendations of Aiken and West (1991).

Overall, the majority of our hypotheses were supported, and while the variance explained is relatively low (.12–.15), it is comparable to similar studies in this area of research (see Hoobler et al. (2018) meta-analysis).

5. Discussion

This study contributes to the recent debate around the overwhelming underrepresentation of women in top management roles in today's businesses, which has not only business effects (Killian, Hukai, & McCarty, 2005) but also social and ethical implications (Klettner et al., 2016). In line with upper echelon theory, we find that the demographics of TMTs of large, public firms – which, thanks to their size, contribute disproportionately to a country's economic performance – are indeed associated with performance; and, in line with the double standards of competence theory that expects women at the top of organizations to be particularly influential on account of the hurdles they have had to overcome to get there, we find that female-led TMTs are associated with better performance than male-led TMTs. These findings support claims that traditional theories of gender diversity may need to be revised in line with the literature on a female leadership advantage at the upper echelons of organizations (Paustian-Underdahl et al., 2014).

When we turn to family businesses, although anecdotally it would seem that these organizations offer a more favorable environment for women to rise to leadership positions, our study shows that they do not appear to be reaping all the potential benefits deriving from gender diverse TMTs. As shown by the interaction (see Fig. 2), our comparison of family and nonfamily businesses indicates that the positive relationship between gender diversity in TMTs and firm financial performance is weaker in family businesses. In other words, in female-led family businesses we do not witness the same positive relationship between gender diversity in the TMT and firm financial performance as we do in nonfamily businesses. We offer four plausible explanations for this finding in line with our theoretical arguments. First, it has been noted that "the emotional attachment to family firm ownership may detract from the firm's focus on economic goals" (Mustakallio, Autio, & Zahra, 2002: 205). Thus the family as a controlling stakeholder may prioritize a desire to preserve its legacy and socioemotional wealth (Gomez-Mejia et al., 2007) above attaining financial results. The controlling family is able to exercise its control through the abovementioned corporate control mechanisms such as dual class shares, pyramids, disproportionate board representation, cross-holdings, and voting agreements (Villalonga & Amit, 2006; 2009). These mechanisms are common in public family businesses and "facilitate the family's insulations from traditional corporate governance mechanisms", allowing these dominant shareholders not only to entrench and extract benefits at the expense of other shareholders, managers, and employees (Braun & Sharma, 2007: 115) but more generally to 'neutralize' the potential advantages of female leadership (Montemerlo et al., 2013). This would result in weakening the potential benefits deriving from financial decision making of senior leaders. In other words, upper echelon theory is weakened in family businesses as the level of managerial discretion that senior leaders are allowed in these organizations is reduced.

Second, women are more common in senior positions in family businesses than nonfamily businesses, and thus may have less visibility and not appear as especially competent in these businesses. In short, the double standard of competence also becomes less powerful in a family businesse. This suggests that family businesses do not necessarily offer an environment that is conducive to reaping the benefits of a gender-diverse senior leadership. Third, the influence of the family as a controlling shareholder may somehow induce female CEOs and CFOs to 'assimilate' into the TMT through a process of socialization that subdues the potential benefits that might derive from a gender diverse team (Rose, 2007). Fourth, public family-controlled firms potentially allow controlling shareholders to expropriate private benefits at the expense of the small shareholders (Agency Problem II) (Sutton, Veliyath, Pieper, Hair, & Caylor, 2018; Villalonga & Amit, 2006), and so financial performance may suffer compared to nonfamily businesses, regardless of whether there is gender diversity in the TMT.

Our other key finding is that TMTs led by female leaders are associated with higher nonfinancial performance and this result is robust across family and nonfamily businesses. Thus we do not find that the family 'neutralizes' gender diversity of TMTs with regard to nonfinancial performance in family businesses. This suggests that family businesses, as organizations that focus on being inclusive and supportive of their internal stakeholders (Miller & Le Breton-Miller, 2005) (including through increased number of women in leadership teams) are in turn more inclusive and supportive of their external stakeholders through increased attention to environmental, governance, and social factors relevant to the sustainability of their business success. The reduction of managerial discretion in family businesses does not appear to play the same role for nonfinancial performance as it does for financial performance. This is likely explained by the fact that nonfinancial goals are more in line with the controlling family's long

term strategy wants, and so the controlling family allows for greater managerial discretion in the realm of nonfinancial strategic decision making, thus allowing the firm to benefit from the gender diversity effect.

On a theoretical level, our findings suggest that, although the 'family effect' in family businesses (Dyer, 2006) can benefit business performance through the family's goals, relationships, and resources (Habbershon, Williams, & MacMillan, 2003) as well as proorganizational (or stewardship) behaviors (Corbetta & Salvato, 2004; Mazzi, 2011), large public family businesses seem to be missing out on other potential financial performance benefits associated with gender diverse leadership teams. This implies that the upper echelon and double standards of competence theories do not apply in family businesses in the same way as they do in nonfamily businesses and therefore warrants further study.

5.1. Limitations and future research

While this study offers important insights with its emphasis on different types of performance outcomes and business settings in some of the world's largest family businesses over a five year period, it also has limitations that need to be taken into account while interpreting its results and in moving this area of research forward. The first key limitation is the fact that we are comparing family businesses to nonfamily businesses, whilst we are aware of the fact that family businesses do not constitute a homogeneous group (Melin & Nordqvist, 2007; Sharma et al., 1997). There are variations in behavior and performance not only between family and nonfamily businesses but also among family businesses (Chua, Chrisman, Steier, & Rau, 2012). However, given the dearth of studies looking into gender diversity and family business performance, we consider this as a first step in our investigation, starting from comparing family to nonfamily businesses as a whole, before taking a finer-grained look among different types of family businesses in future

work. For example, future research should consider using a continuous measure of family business, such as family influence (Klein, Astrachan, & Smyrnios, 2005), that allows for the investigation of heterogeneities across family businesses. To add further nuance to these results, scholars should also explore the potential existence of curvilinear relationships between gender influences and performance outcomes in different types of family businesses.

Second, the time frame of this research follows one of the most challenging economic times in recent North American history, and the relationship between TMT leadership and firm performance may have been affected by external circumstances. The resilience of family businesses in economic downturns, because of the family's long-term orientation (Amann & Jaussaud, 2012), suggests that in difficult times the discretion of non-family managers may be further limited. Third, our research is based on a sample of large North American firms, so the illustrated findings may not appear in smaller firms that prioritize different types of performance outcomes or in other cultures that may view and support (or hinder) women in different ways. To establish whether these results are indeed generalizable across organizational types, cultural backgrounds, and periods of time, future research should investigate these gender dynamics across other settings and time frames.

Fourth, although we control for industry in our analyses, future research could investigate the context in which businesses operate in greater detail. For example scholars could control for short term (versus other) assets, in order to take a finer grained look at industry effects on financial performance (since ROA is dependent on how asset-heavy an industry is).

Finally, we take numerous steps to remove endogeneity concerns in this study, yet we cannot fully show causation with our research design. To alleviate concerns regarding potential spurious relationships, we control for variables that may simultaneously influence the role of

female leaders in TMTs and company performance (e.g., firm size). We also reduce concerns about reverse causation by lagging our independent variable (as one necessary condition for establishing causality; Shamir, 2011). Furthermore, most of the female leaders already held their positions when we measured their firm's performance and this time lag between their appointment and measuring firm performance further reduces the potential for reverse causality (Abdullah et al., 2016). As already mentioned, theory on the glass cliff phenomenon also alleviates these concerns, seeing that women are more likely to be promoted into leadership during financially challenging times (Ryan & Haslam, 2007), which would imply an opposite relationship to the one we hypothesize. Likewise, empirical evidence has ruled out reverse causation regarding the role of female leaders for their firms' performance (Dezso & Ross, 2012). Future research should nonetheless incorporate longitudinal designs in which researchers track the short-term and long-term performance implications of women in TMTs over longer periods of time, looking at the effects of changes as well as stability in such TMTs with regard to female executives and their accompanying gender diversity.

Lastly, the focus on observable factors of gender, such as demographics here, is appropriate in light of the limited state of research on female leadership in TMTs. However, moving forward it is essential that we also investigate who these women in senior leadership positions are above and beyond simply being women. That is, who are they in terms of their education, tenure in the company and in their current CEO or CFO position, occupational history, career path (internally versus externally recruited), and motivation (Campopiano et al., 2017). For example, research has identified different patterns of accumulating relevant work experience based on gender, which limit the ability of women to access CEO roles (Fitzsimmons,

Callan, & Paulsen, 2014). To help organizations better incorporate and support their leaders of both genders, further details are critically required.

5.2. Practical implications and conclusions

With regard to implications for practitioners, we shed further light on the business case for diversifying organizational TMTs in family businesses based on gender, encouraging women to become role models for the younger generations who are climbing up the career ladder. Family business owners and their advisors will benefit from knowing that TMTs with female senior leaders can contribute not only to nonfinancial but also to financial performance, if the circumstances allow them to. At the same time, nonfamily business owners and executives can learn from family businesses how to create a context that generally allows women to rise to the top of the organization (Goodman et al., 2003). The longer term strategic orientation (Zellweger, 2007) that is typical of family businesses can encourage business strategies that are sustainable over time (Habbershon & Pistrui, 2002), allowing for greater cohesiveness and inclusiveness (Lansberg & Astrachan, 1994) that contribute to "the erosion of conscious and unconscious bias, making space for women at the top" (Ernst & Young, 2015: 3). In sum, female leadership is an important component for family businesses to flourish, which offers hope for the increased promotion of female senior leaders in the future.

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Table 1 Descriptive statistics.

	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Industry	44.48	18.72	1								
2. Firm size	4.17	.60	.14**	1							
3. Firm age	3.32	.77	14**	.23**	1						
4. CapEx	-1.56	.55	32**		.08**	1					
5. Size of management team	5.55	.91	.03	.06**	.11**	.02	1				
6. Financial performance	.07	.06	03	.31**	.21**	.00	.06**	1			
7. Nonfinancial performance	.02	7.12	11**	37**	16**	.16**	12**	05*	1		
8. Family business	.22	.42	.09**	07**	.01	.01	03	02	.04	1	
9. Female senior leadership	.12	.32	01	.00	.02	.00	.01	.06*	.05*	03	1

N = 1,768 * p < .05; ** p < .01

Table 2 Female senior leadership and firm performance.

	1	2	3	4
	-	DV=Financial	DV=Non-	DV=Non-
	performance	performance	financial	financial
	Porrorramo	Porrormano	performance	performance
Industry	03	03	03	03
Firm size	31***	31***	.30***	.30***
Firm age	08**	08**	.13***	.13***
CapEx	.07**	.07**	.06*	.06*
Size of mgt	09***	08***	.01	.01
team				
Female senior				
leadership	.05*	.08**	.05*	.03
Family				
business		.07**		03
FB ^a x Female				
senior				
leadership		08**		.04
Year				
dummies	YES	YES	YES	YES
Constant	.28***	.27***	-18.25***	-18.04***
No. of				
observations	1,786	1,786	1,761 ^b	1,761 ^b
Adjusted R-				
squared	.15	.15	.12	.12

^a FB = Family Business. Tabled values represent standardized beta coefficients. ^b We lose some observations due to missing data. * p < .05; ** p < .01; *** p < .001

Figure 1: Conceptual model of female leadership and firm performance as a function of family business status

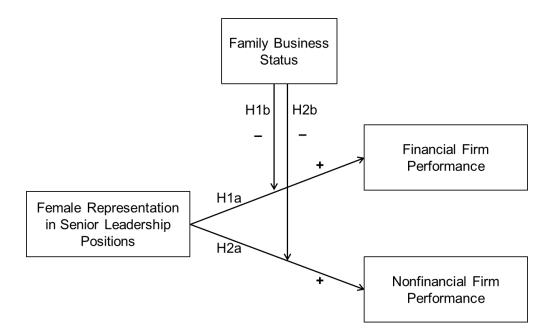
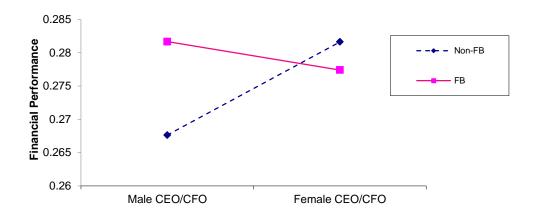


Figure 2: Interaction between leadership by gender and family business on financial performance



Note: FB = Family Business

References

- Abdullah, S. N., Ismail, K. N. I. K., & Nachum, L. (2016). Does having women on boards create value? The impact of societal perceptions and corporate governance in emerging markets. *Strategic Management Journal*, *37*(3), 466–476.
- Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *Review of Financial Studies*, *18*(4), 1403–1432.
- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291–309.
- Adler, N. J. (1997). Global leadership: Women leaders. *MIR: Management International Review*, 37, 171–196.
- Ahrens, J. P., Landmann, A., & Woywode, M. (2015). Gender preferences in the CEO successions of family firms: Family characteristics and human capital of the successor. *Journal of Family Business Strategy*, 6(2), 86–103.
- Aiken, L. S., & West, S. G. (1991). Multiple regression. Beverly Hills: Sage Publishing.
- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573–596.
- Alessandri, T. M., Mammen, J., & Eddleston, K. (2018). Managerial incentives, myopic loss aversion, and firm risk: A comparison of family and non-family firms. *Journal of Business Research*, 91, 19-27.
- Amann, B., & Jaussaud, J. (2012). Family and non-family business resilience in an economic downturn. *Asia Pacific Business Review, 18*(2), 203–223.
- Amore, M. D., Garofalo, O., & Minichilli, A. (2014). Gender interactions within the family firm. *Management Science*, 60(5), 1083–1097.
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *The Journal of Finance*, *58*(3), 1301–1327.
- Anna, A. L., Chandler, G. N., Jansen, E., & Mero, N. P. (2000). Women business owners in traditional and non-traditional industries. *Journal of Business Venturing*, 15(3), 279–303.
- Arthaud-Day, M. L., Certo, S. T., Dalton, C. M., & Dalton, D. R. (2006). A changing of the guard: Executive and director turnover following corporate financial restatements. *Academy of Management Journal*, 49(6), 1119 –1136.
- Astrachan, J. H. (2010). Strategy in family business: Toward a multidimensional research agenda. *Journal of Family Business Strategy*, *I*(1), 6–14.
- Auer, B. R. (2014). Do socially responsible investment policies add or destroy European stock portfolio value? *Journal of Business Ethics*, 135(2), 1–17.
- Barrett, M., & Moores, K., (2009). Women in family business leadership roles: Daughters on the stage. Cheltenham, UK: Edward Elgar Publishing.
- Baù, M., Chirico, F., Hoskisson, R. E., & Pathak, S. M. (2016). Portfolio restructuring in family and non-family-controlled firms. *Academy of Management Proceedings*, 2016(1), 12016.
- Baù, M., Chirico, F., Hoskisson, R. E., & Pathak, S. M. (2018). Family versus non-family firm mergers: Likes attract likes, but complementarity also helps. *Academy of Management Proceedings*, 2018 (1), 18768.

- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, *55*(1), 82–113.
- Bird, B., & Brush, C. (2002). A gendered perspective on organizational creation. *Entrepreneurship Theory and Practice*, 26(3), 41–65.
- Block, J., & Wagner, M. (2014). Ownership versus management effects on corporate social responsibility concerns in large family and founder firms. *Journal of Family Business Strategy*, 5(4), 339–346.
- Block, J. H., Jaskiewicz, P., & Miller, D. (2011). Ownership versus management effects on performance in family and founder companies: A Bayesian reconciliation. *Journal of Family Business Strategy*, 2(4), 232–245.
- Boeker, W. (1997). Strategic change: The influence of managerial characteristics and organizational growth. *Academy of Management Journal*, 40(1), 152–170.
- Borghesi, R., Houston, J. F., & Naranjo, A. (2014). Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance*, 26, 164–181.
- Braun, M., & Sharma, A. (2007). Should the CEO also be chair of the board? An empirical examination of family-controlled public firms. *Family Business Review*, 20(2), 111 –126.
- Brunninge, O., Nordqvist, M., & Wiklund, J. (2007). Corporate governance and strategic change in SMEs: The effects of ownership, board composition and top management teams. *Small Business Economics*, 29(3), 295–308.
- Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, 29(3), 249–265.
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6), 749–778.
- Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. *Entrepreneurship Theory and Practice*, *36*(6), 1153–1173.
- Chatman, J. A., & Flynn, F. J. (2001). The influence of demographic heterogeneity on the emergence and consequences of cooperative norms in work teams. *Academy of Management Journal*, 44(5), 956–974.
- Chrisman, J. J., Chua, J. H., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19–39.
- Chrisman, J. J., Chua, J. H., & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29(5), 555–576.
- Chua, J. H., Chrisman, J. J., & Chang, E. P. (2004). Are family firms born or made? An exploratory investigation. *Family Business Review*, 17(1), 37–54.
- Chua, J. H., Chrisman, J. J., Steier, L. P., & Rau, S. B. (2012). Sources of heterogeneity in family firms: An introduction. *Entrepreneurship Theory and Practice*, *36*(6), 1103–1113.
- Corbetta, G., & Salvato, C. (2004). Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: A commentary on "comparing the agency costs of

- family and non-family firms: Conceptual issues and exploratory evidence". *Entrepreneurship Theory and Practice*, 28(4), 355-362.
- Curimbaba, F. (2002). The dynamics of women's roles as family business managers. *Family Business Review*, 15(3), 239–252.
- Daily, C. M., & Dalton, D. R. (2003). Women in the boardroom: a business imperative. *Journal of Business Strategy*, 24(5), 8–9.
- Danes, S. M., & Olson, P. D. (2003). Women's role involvement in family businesses, business tensions, and business success. *Family Business Review*, 16(1), 53–68.
- Danes, S. M., Stafford, K., & Loy, J. T. C. (2007). Family business performance: The effects of gender and management. *Journal of Business Research*, 60(10), 1058–1069.
- De Dreu, C. K., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, 86(6), 1191–1201.
- De Massis, A., Kotlar, J., Campopiano, G., & Cassia, L. (2013). Dispersion of family ownership and the performance of small-to-medium size private family firms. *Journal of Family Business Strategy*, 4(3), 166–175.
- Deniz, M. C. D., & Suarez, M. K. C. (2005). Corporate social responsibility and family business in Spain. *Journal of Business Ethics*, 56(1), 27–41.
- Dezso, C. L., & Ross, G. D. (2012). Does female representation in top management affect firm performance? A panel data investigation. *Strategic Management Journal*, *33*(9), 1072–1089.
- Dyer, W. G. (2006). Examining the "family effect" on firm performance. *Family Business Review*, 19(4), 253–273.
- Dyer, W. G., & Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, *30*(6), 785–802.
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly*, *14*(6), 807–834.
- Eagly, A. H., & Johannesen-Schmidt, M. C. (2001). The leadership styles of women and men. *Journal of Social Issues*, *57*(4), 781–797.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men. *Psychological bulletin*, *129*(4), 569–591.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*(3), 573–598.
- Ernst & Young. (2015). Women in leadership: The family business advantage. EYGM Limited.
- Finkelstein, S., & Hambrick, D. C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35(3), 484–503.
- Firth, M., Fung, P. M., & Rui, O. M. (2007). How ownership and corporate governance influence chief executive pay in China's listed firms. *Journal of Business Research*, 60(7), 776–785.
- Fitzsimmons, T. W., Callan, V. J., & Paulsen, N. (2014). Gender disparity in the C-suite: Do male and female CEOs differ in how they reached the top? *The Leadership Quarterly*, 25(2), 245–266.

- Foschi, M. (1996). Double standards in the evaluation of men and women. *Social Psychology Quarterly*, 59(3), 237–254.
- Foschi, M. (2000). Double standards for competence: Theory and research. *Annual Review of Sociology*, 26, 21–42.
- Frank, M. Z., & Goyal, V. K. (2007). *Corporate leverage: How much do managers really matter?*, available at SSRN 971082.
- Gabriel, S., & Gardner, W. L. (1999). Are there "his" and "hers" types of interdependence? The implications of gender differences in collective versus relational interdependence for affect, behavior, and cognition. *Journal of Personality and Social Psychology*, 77(3), 642–655.
- Gillis-Donovan, J., & Moynihan-Bradt, C. (1990). The power of invisible women in the family business. *Family Business Review*, *3*(2), 153–167.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *The Academy of Management Annals*, *5*(1), 653–707.
- Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, *52*(1), 106–137.
- Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies*, 47(2), 223–252.
- Goodman, J. S., Fields, D. L., & Blum, T. C. (2003). Cracks in the glass ceiling: In what kinds of organizations do women make it to the top? *Group & Organization Management*, 28(4), 475–501.
- Habbershon, T. G., & Pistrui, J. (2002). Enterprising families domain: Family-influenced ownership groups in pursuit of transgenerational wealth. *Family Business Review*, 15(3), 223–237.
- Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of Business Venturing*, 18(4), 451–465.
- Hair, J. F., Rolph E., Anderson, R. L., Tatham, & Black, W. C. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall International.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2), 334–343.
- Hambrick, D. C., & Finkelstein, S. (1987). Managerial discretion: A bridge between polar views of organizational outcomes. *Research in Organizational Behavior*, *9*, 369–406.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, *9*(2), 193–206.
- Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: empirical evidence and theoretical perspectives. *Academy of Management Journal*, 42(5), 479–485.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, *57*(4), 657–674.
- Hillman, A. J., Shropshire, C., & Cannella, A. A. (2007). Organizational predictors of women on corporate boards. *Academy of Management Journal*, 50(4), 941–952.

- Ho, S. S., Li, A. Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics*, 127(2), 351–370.
- Homan, A. C., Van Knippenberg, D., Van Kleef, G. A., & De Dreu, C. K. (2007). Bridging faultlines by valuing diversity: diversity beliefs, information elaboration, and performance in diverse work groups. *Journal of Applied Psychology*, 92(5), 1189–1199.
- Hoobler, J. M., Lemmon, G., & Wayne, S. J. (2014). Women's managerial aspirations: An organizational development perspective. *Journal of Management*, 40, 703–730.
- Hoobler, J. M., Masterson, C. R., Nkomo, S. M., & Michel, E. J. (2018). The business case for women leaders meta-analysis, research critique, and path forward. *Journal of Management*, 44(6): 2473–2499.
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822–839.
- James, A. E., Jennings, J. E., & Breitkreuz, R. S., (2012). Worlds apart? Rebridging the distance between family science and family business research. *Family Business Review*, 25(1), 87–108.
- Jehn, K. A., Northcraft, G. B., & Neale, M. A. (1999). Why differences make a difference: A field study of diversity, conflict, and performance in workgroups. *Administrative Science Quarterly*, 44(4), 741–763.
- Jennings, P. D., Sarathy, R., Eddleston, K. A., & Jennings, J. E. (2015). Part I summary: The impact of SEW on family and non-family firms in developed versus emerging economies. *Firms within Families: Enterprising in Diverse Country Contexts*, 117-126.
- Jeong, S. H., & Harrison, D. A. (2017). Glass Breaking, Strategy Making, and Value Creating: Meta-Analytic Outcomes of Women as CEOs and TMT members. *Academy of Management Journal*, 60(4), 1219 –1252.
- Jimenez, M. R. (2009). Research on women in family firms: Current status and future directions. *Family Business Review*, 22(1), 53–64.
- Killian, C. M., Hukai, D., & McCarty, C. E. (2005). Building diversity in the pipeline to corporate leadership. *Journal of Management Development*, 24(2), 155–169.
- Klein, S. B., Astrachan, J. H., & Smyrnios, K. X. (2005). The F-PEC scale of family influence: Construction, validation, and further implication for theory. *Entrepreneurship Theory and Practice*, 29(3), 321–339.
- Klettner, A., Clarke, T., & Boersma, M. (2016). Strategic and regulatory approaches to increasing women in leadership: multilevel targets and mandatory quotas as levers for cultural change. *Journal of Business Ethics*, 133(3), 395–419.
- Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*, *137*(4), 616.
- Kolev, G. I. (2012). Underperformance by female CEOs: A more powerful test. *Economics Letters*, 117(2), 436–440.
- Krishnan, H. A., & Park, D. (2005). A few good women—on top management teams. *Journal of Business Research*, 58(12), 1712–1720.

- Lansberg, I., & Astrachan, J. H. (1994). Influence of family relationships on succession planning and training: The importance of mediating factors. *Family Business Review*, 7(1), 39–59.
- Laszlo, C. (2003). The sustainable company: How to create lasting value through social and environmental performance. Island Press.
- Lauterbach, K. E., & Weiner, B. J. (1996). Dynamics of upward influence: How male and female managers get their way. *The Leadership Quarterly*, 7(1), 87–107.
- Le Breton-Miller, I., & Miller, D. (2006). Why do some family businesses out-compete? Governance, long-term orientations, and sustainable capability. *Entrepreneurship Theory and Practice*, *30*(6), 731 –746.
- Lund, D. B. (2008). Gender differences in ethics judgment of marketing professionals in the United States. *Journal of Business Ethics*, 77(4), 501–515.
- Lyness, K. S., & Thompson, D. E. (2000). Climbing the corporate ladder: do female and male executives follow the same route? *Journal of Applied Psychology*, 85(1), 86–101.
- Mackey, J. D., Roth, P. L., Van Iddekinge, C. H., & McFarland, L. A. (in press). A meta-analysis of gender proportionality effects on job performance. *Group & Organization Management*, doi: 1059601117730519.
- Mazzi, C. (2011). Family business and financial performance: Current state of knowledge and future research challenges. *Journal of Family Business Strategy*, 2(3), 166–181.
- Melin, L., & Nordqvist, M. (2007). The reflexive dynamics of institutionalization: The case of the family business. *Strategic Organization*, *5*(3), 321–333.
- McGuire, J., Dow, S., & Ibrahim, B. (2012). All in the family? Social performance and corporate governance in the family firm. *Journal of Business Research*, 65(11), 1643–1650.
- Miller, D., & Le Breton-Miller, I. (2005). Management insights from great and struggling family businesses. *Long Range Planning*, 38(6), 517–530.
- Miller, D., Minichilli, A., & Corbetta, G. (2013). Is family leadership always beneficial? *Strategic Management Journal*, *34*(5), 553–571.
- Montemerlo, D., Minichilli, A., & Corbetta, G. (2013). The determinants of women's involvement in top management teams: Opportunities or obstacles for family-controlled firms? In K. X. Smyrnios, P. Z. Poutziouris & S. Goel (Eds.) *Handbook of Research in Family Business* (pp. 301–322). Cheltenham, UK: Edward Elgar.
- Mustakallio, M., Autio, E., & Zahra, S. A. (2002). Relational and contractual governance in family firms: Effects on strategic decision making. *Family Business Review*, 15(3), 205 222.
- Nekhili, M., Chakroun, H., & Chtioui, T. (2016). Women's leadership and firm performance: Family versus nonfamily firms. *Journal of Business Ethics*, 1–26.
- Nelson, T., & Constantinidis, C. (2017). Sex and gender in family business succession research: A review and forward agenda from a social construction perspective. *Family Business Review*, 30(3), 219–241.
- Nielsen, M. B., Skogstad, A., Matthiesen, S. B., & Einarsen, S. (2016). The importance of a multidimensional and temporal design in research on leadership and workplace safety. *The Leadership Quarterly*, 27(1), 142–155.
- Olson, P. D., Zuiker, V. S., Danes, S. M., Stafford, K., Heck, R. K., & Duncan, K. A. (2003). The impact of the family and the business on family business sustainability. *Journal of Business Venturing*, 18(5), 639–666.

- Paustian-Underdahl, S., Walker, L. S. & Woehr, D. (2014). Gender and perceptions of leadership effectiveness: A Meta-analysis of contextual moderators. *Journal of Applied Psychology*, 99(6), 1129–1145.
- Peni, E. (2014). CEO and Chairperson characteristics and firm performance. *Journal of Management & Governance*, 18(1), 185–205.
- Pieper, T. M. (2010). Non solus: Toward a psychology of family business. *Journal of Family Business Strategy*, 1(1), 26–39.
- Post, C. (2015). When is female leadership an advantage? Coordination requirements, team cohesion, and team interaction norms. *Journal of Organizational Behavior*, *36*(8), 1153–1175.
- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A metaanalysis. *Academy of Management Journal*, 58(5), 1546–1571.
- Randel, A. E. (2002). Identity salience: A moderator of the relationship between group gender composition and work group conflict. *Journal of Organizational Behavior*, 23(6), 749–766.
- Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. *Corporate Governance: An International Review*, *15*(2), 404–413.
- Rosette, A. S., & Tost, L. P. (2010). Agentic women and communal leadership: how role prescriptions confer advantage to top women leaders. *Journal of Applied Psychology*, 95(2), 221.
- Ryan, M. K., & Haslam, S. A. (2007). The glass cliff: Exploring the dynamics surrounding the appointment of women to precarious leadership positions. *Academy of Management Review*, 32(2), 549–572.
- Schulmeyer, M., & Knobl, T. 2014. The CEO/CFO duo: An empirical assessment of their effect on firm performance. *Academy of Management Proceedings*, *1*, 12805.
- Schwab, A., Werbel, J. D., Hofmann, H., & Henriques, P. L. (2016). Managerial gender diversity and firm performance: an integration of different theoretical perspectives. *Group & Organization Management*, 41(1), 5–31.
- Schyns, B., & Meindl, J. R. (2005). An overview of implicit leadership theories and their application in organization practice. In B. Schyns, & J. R. Meindl (Eds.), *The leadership horizon series: Implicit leadership theories—Essays and explorations* (pp. 15–36). Greenwich, CT: Information Age.
- Shamir, B. (2011). Leadership takes time: Some implications of (not) taking time seriously in leadership research. *The Leadership Quarterly*, 22(2), 307–315.
- Sharma, P., Chrisman, J. J., & Chua, J. H. (1997). Strategic management of the family business: Past research and future challenges. *Family Business Review*, 10(1), 1–35.
- Stahl, G. K., & De Luque, M. S. (2014). Antecedents of responsible leader behavior: A research synthesis, conceptual framework and agenda for future research. *Academy of Management Perspectives*, 28(3), 235–254.
- Sutton, C., Veliyath, R., Pieper, T. M., Hair, J. F., & Caylor, M. (in press). Secondary agency conflicts: A synthesis and proposed measurement model. *Long Range Planning*, https://doi.org/10.1016/j.lrp.2017.12.004.

- van Knippenberg, D., Dawson, J. F., West, M. A., & Homan, A. C. (2011). Diversity faultlines, shared objectives, and top management team performance. *Human Relations*, 64(3), 307–336.
- van Knippenberg D., De Dreu C. K. W., & Homan A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89(6), 1008–1022.
- van Knippenberg, D., & Schippers, M. C. (2007). Work group diversity. *Annual Review of Psychology*, 58, 515–541.
- Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417.
- Villalonga, B., & Amit, R. (2009). How are US family firms controlled? *Review of Financial Studies*, 22, 3047–3091.
- Wagner, D., Block, J. H., Miller, D., Schwens, C., & Xi, G. (2015). A meta-analysis of the financial performance of family firms: Another attempt. *Journal of Family Business Strategy*, 6(1), 3–13.
- Waldman, D. A., & Siegel, D. (2008). Defining the socially responsible leader. *The Leadership Quarterly*, 19(1), 117–131.
- Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, *33*(8), 885–913.
- Wiengarten, F., Lo, C. K., & Lam, J. Y. (2015). How does sustainability leadership affect firm performance? The choices associated with appointing a Chief Officer of corporate social responsibility. *Journal of Business Ethics*, 140(3), 1–17.
- Williams, K. K., & O'Reilly, C.A. (1998). Demography and diversity in organizations: A review of 40 years of research. *Research in Organizational Behavior*, 20, 77–140.
- Wolf, J. (2014). The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance. *Journal of Business Ethics*, 119(3), 317–328.
- Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, 18(1), 23–40.
- Zellweger, T. (2007). Time horizon, costs of equity capital, and generic investment strategies of firms. *Family Business Review*, 20(1), 1–15.

APPENDIX A

Sustainalytics: Selected Examples of Indicators

Theme	Topic	Examples of Indicators Name			
Governance	Business Ethics	Policy on Bribery and Corruption			
		Whistleblower Programs			
		Policy on Responsible Investment			
		Policy on Money Laundering			
		Policy on Animal Testing			
Governance	Corporate Governance	CSR Reporting Quality			
	1	In-house Team Dedicated to Responsible			
		Investment/Finance			
		Board Diversity			
		Separation of Board Chair and CEO Roles			
		Board Independence			
Governance	Public Policy	Policy on Political Involvement and Contributions			
	,	Total Value of Political Contributions			
		Transparency on Payments to Host Governments			
		Public Policy Related Controversies or Incidents			
Social	Employees	Policy on Freedom of Association			
	Zimpioyees	Formal Policy on Working Conditions			
		Formal Policy on the Elimination of Discrimination			
		Programs to Increase Workforce Diversity			
		Programs and Targets to Reduce Health and Safety			
		Incidents			
		Health and Safety Certifications			
Social	Contractors & Supply Chain	Scope of Social Supply Chain Standards			
	Cham	Supply Chain Monitoring System			
		Supply Chain Audits			
		Fair Trade Products			
		Contractors & Supply Chain Related Controversies or			
		Incidents			
Social	Customers	Public Position Statement on Responsible Marketing			
		Programs to Minimise Health Impact of Electronic and			
		Magnetic Fields			
		Policy on Conflicts of Interest			
		Adherence to WHO Ethical Criteria for Medicinal Drug			
		Promotion			
		Customer Related Controversies or Incidents			
Social	Society & Community	Activities in Sensitive Countries			
		Policy on Human Rights			
		Community Involvement Programs			
		Policies on Access to Health Care			
		Policy on Indigenous People and Land Rights			
Social	Philanthropy	Guidelines for Philanthropic Activities and Primary			
	1.5	Areas of Support			

		Corporate Foundation	
Environment	Operations	Formal Environmental Policy	
		Reporting Quality Environmental Data	
		Environmental Management System	
		Oil Spill Reporting and Performance	
		Waste Intensity	
Environment	Contractors & Supply Chain	Formal Policy or Program on Green Procurement	
		Programs and Targets for Environmental Improvement of Suppliers	
		External Environmental Certification Suppliers	
		Data on Percentage of Recycled/Re-used Raw Material Used	
		Programs and Targets to Promote Sustainable Food Products	
		Contractors & Supply Chain Related Controversies or Incidents	
Environment	Products & Services	Sustainability Related Products & Services	
		Revenue from Clean Technology or Climate Friendly Products	
		Automobile Fleet Average CO2 Emissions	
		Policy on Use of Genetically Modified Organisms	
		(GMO) in Products	
		Environmental & Social Standards in Credit and Loan Business	
		Assets Under Management in Responsible Investment	