

# Board Gender Diversity and Firm Financial Performance: Exploring the role of Directors' Family Affiliations

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**ABSTRACT** Recent studies acknowledge that the contribution of female directors at the board may not be uniform but instead varies depending on their individual characteristics and board context. In this study we focus on a pivotal yet insufficiently explored facet of female directors – their affiliation with the business owning family – and assess its implications for family firm financial performance. Drawing upon the ‘doing gender’ perspective, we contend that family-affiliation creates a formidable barrier for female family directors, impeding their legitimacy within the board and ultimately reducing their contribution to firm financial performance. Our empirical analysis spanning 127 Italian listed family firms from 2003 to 2019 reveals that family female directors exhibit a less positive influence on firm financial performance than their non-family counterparts. We further show that this effect is contingent on the presence of male family members on the board – being positive when their presence is low but turning negative when their presence is high. In essence, our study represents an important advancement in understanding the intricate and contingent effects of female directors within a distinct context of family firms.

**Keywords:** boards of directors, doing gender, family affiliation, family firms, female directors, gender diversity

## INTRODUCTION

Gender diversity on corporate boards has long garnered interest from researchers, practitioners, and corporate governance activists (Rigolini and Huse, 2021; Seierstad et al., 2017;

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Terjesen et al., 2009; Torchia et al., 2011). Studies suggest that gender diversity can be a strategic asset that enhances the board decision-making process (Adams and Ferreira, 2009) and acts as a signal of meritocracy by aligning the board's demographic composition with that of the organization it governs (Eyring and Stead, 1998). However, negative social-psychological dynamics, such as subgroup formation, biases, and conflicts, can offset these benefits (Kirsch, 2018). In light of these countervailing forces, empirical evidence on the relationship between board gender diversity and firm performance remains mixed, revealing positive, negative, and insignificant effects across studies (c.f. Laique et al., 2023; Nguyen et al., 2020; Post and Byron, 2015). Despite this conflicting evidence, global pressure for gender balance on corporate boards continues to rise, as exemplified by the European Parliament's recent legislation mandating that firms have at least 40 per cent of the underrepresented gender among non-executive directors or 33 per cent among all directors by 2026 (European Commission, 2022). As more women join corporate boards (Spencer Stuart, 2023), deeper insights into how and when gender diversity can effectively enhance board decision making are becoming increasingly important (Weck et al., 2022).

Despite significant progress in understanding female directors' contributions to board governance, important differences among them remain largely unexplored. The extant literature has primarily compared gender-diverse boards with all-male boards, inadvertently overlooking important distinctions between different categories of female directors (Campopiano et al., 2023; Cruz et al., 2019). To address this critical gap, recent studies have begun to explore various attributes, such as human (Bennouri et al., 2018; Gull et al., 2018) and social capital (Wang et al., 2021), independence (Ting et al., 2021), and the specific roles held by female directors (Weck et al., 2022; Zalata et al., 2019), as pivotal factors in the impact of board gender diversity on firm outcomes.

Among these characteristics *family affiliation* – the connection or association of a director with the founders or current owners via membership in the family by blood, marriage, or adoption – is conspicuous. It remains one of the most salient yet least understood distinguishing factors between the different categories of female directors (De Massis et al., 2024; Maseda et al., 2022). Furthermore, family affiliation has been found to be a prominent catalyst for the ascent of women into directorship roles (Amore et al., 2014; Bianco et al., 2015). Given the inherently gendered nature of family dynamics, familial ties can significantly influence female directors' behaviour and impact, differentiating them from their non-family counterparts (Calabrò et al., 2025; Campopiano et al., 2017; Maseda et al., 2022). This creates a unique form of *family-induced diversity*, i.e. diversity that stems from family involvement on the board (Bauweraerts et al., 2022), which may lead to distinct effects of board gender diversity on firm performance outcomes.

However, the literature remains inconclusive regarding how family affiliation affects the outcomes of board gender diversity. Some argue that family female directors face more challenges in exerting influence than do non-family female directors (González et al., 2020; Herdhayinta et al., 2021), while others suggest that family affiliation can enhance the power and legitimacy of women in the boardroom (Bauweraerts et al., 2022; Calabrò et al., 2023; Singh et al., 2015). Scarce empirical evidence coming primarily from emerging market contexts does not bring clarity to this issue (cf. González et al., 2020; Herdhayinta et al., 2021). Against this backdrop, it becomes paramount to understand how family-induced diversity interacts with gender diversity to influence

board performance, prompting the following research question: *How do directors' family affiliations shape the effect of board gender diversity on firm financial performance?*

To address this question, we draw on the 'doing gender' perspective (Alvesson and Billing, 2009; Bruni et al., 2004; West and Zimmerman, 1987) – one of the most influential theories in gender research (Deutsch, 2007; Messerschmidt, 2009). According to this view, *doing gender* refers to '... a complex of socially guided perceptual, interactional, and micropolitical activities' that occur across various institutional arenas and define certain behaviours as either masculine or feminine (West and Zimmerman, 1987, p. 126). This theoretical lens is particularly relevant to our study because it challenges the notion of gender as a stable individual trait, instead conceptualizing it as a fluid, context-dependent aspect of social situations (Nentwich and Kelan, 2014). By adopting this perspective, we focus on the role of social context in the enactment of gender, and in doing so can better understand why prior studies report varying outcomes for board gender diversity.

Examining doing gender in the context of corporate boards, we argue that directors' family affiliations introduce additional barriers that limit the benefits of board gender diversity on firm financial performance. Specifically, we propose that the presence of *non-family female directors* has a stronger positive effect on firm financial performance than the presence of *family female directors*. Furthermore, we contend that family relationships on the board – particularly the presence of family male directors – act as a boundary condition that shapes the performance outcomes associated with family female directors.

Our study, using a sample of 127 Italian family corporations listed on Euronext Milan (EXM) between 2003 and 2019, reveals that the influence of board gender diversity depends on directors' family affiliations. We find non-family females contribute more positively to firm financial performance than family female directors. Moreover, the effect of family female directors is contingent on the presence of family male directors: their impact is positive when the presence of family male directors is low, whereas the relationship turns negative when the presence of family male directors on the board is high.

Our study's contribution is threefold. First, our findings contribute to the board gender diversity research (Kirsch, 2018; Rigolini and Huse, 2021; Seierstad et al., 2017; Torchia et al., 2011) by highlighting directors' family affiliation as a critical factor in understanding the impact of board gender diversity on firm financial performance. Second, our research advances family business studies by elucidating the gendered nature of family relationships and their spillover effects on board governance. By considering the presence of family male directors on the board as an activating mechanism for reinforcing family gender roles, we reconcile the seemingly opposite perspectives in prior research (cf. Bauweraerts et al., 2022; González et al., 2020; Herdhayinta et al., 2021; Singh et al., 2015). Third, our study extends the 'doing gender' perspective (West and Zimmerman, 1987, p. 2009) by examining the role of men in the production of gender within organizational settings and its implications for firm outcomes.

Our findings are also valuable for practitioners seeking to maximize the benefits of gender diversity in family firms. In particular, we highlight the crucial role of non-family female directors in enhancing financial performance, suggesting that family firms should prioritize their recruitment. At the same time, when appointing family female directors, careful consideration should be given to the broader board composition, since the

presence of male family members can hinder a family female director's ability to contribute fully. This calls for a more nuanced approach to the assessment of gender diversity in which family relationships are considered alongside the representation of female directors. Finally, our results underscore the importance of raising awareness among male family directors, and family firms more broadly, about entrenched family gender dynamics. Measures such as appointing independent facilitators for key decisions, embedding inclusivity metrics into board evaluations, providing training on inclusive leadership and encouraging male allyship can help build more collaborative boards that ultimately enhance firm value.

## THEORETICAL BACKGROUND

The corporate governance literature reveals a broad consensus that gender diversity on corporate boards can significantly benefit organizations (Bennouri et al., 2018; Issa et al., 2022; Kirsch, 2018; Seierstad et al., 2017). Gender-diverse boards tend to leverage a broader range of perspectives, which enhances their human and social capital, leading to more informed decision making (Hillman et al., 2002; Singh et al., 2008). Furthermore, female directors, often less tied to the traditional 'old boy's networks', may be better positioned to conduct vigilant monitoring (Adams and Ferreira, 2009; Carter et al., 2003; De Cabo et al., 2012), foster transparency (Larkin et al., 2013), reduce corporate misconduct (Arun et al., 2015; Richardson et al., 2016; Wahid, 2019), and promote egalitarian values that can enhance the firm's reputation and attractiveness to stakeholders (Lamkin Broome and Krawiec, 2008). Increased board diversity is also seen as a step towards rectifying the historically disadvantaged position of women in leadership roles (Eyring and Stead, 1998; Nicholls Mutter, 2020).

However, these benefits may go unrealized or even turn to disadvantages due to multiple barriers that female directors face when exercising their influence on board decision making (Carter et al., 2010). In male-dominated corporate settings, the presence of women can activate self-categorization processes, creating in-group/out-of-group divisions; male directors align with the majority group and women directors are perceived as out-group members (Hogg and Terry, 2000). This dynamic can result in destructive social-psychological processes, such as decreased cohesion, communication barriers, and conflict (Forbes and Milliken, 1999), which are further exacerbated by stereotypes and biases (Westphal and Milton, 2000) that undermine the legitimacy of females in leadership roles (Talmud and Izraeli, 1999). These challenges often limit women's ability to exert meaningful influence in the boardroom, contributing to mixed empirical findings on the impact of board gender diversity on firm performance (Adams and Ferreira, 2009; Campbell and Mínguez-Vera, 2008; Carter et al., 2003; Pletzer et al., 2015).

To better understand when and how board gender diversity benefits firm performance, scholars have examined contextual factors at the director-board interface that shape female directors' ability and willingness to engage in board work. These include attributes such as human and social capital, independence, and leadership roles, which serve as proxies for female directors' power and legitimacy (Bennouri et al., 2018; Issa

et al., 2022; Liu et al., 2014). A crucial yet often overlooked aspect is the impact of family affiliation (Campopiano et al., 2019; Cruz et al., 2019; Herdhayinta et al., 2021); this is particularly pertinent because family ties are a key factor in appointing members of corporate boards (Sheridan and Milgate, 2005). For example, a study of Italian firms found that up to 80 per cent of female directors are linked by family ties with the majority shareholders (Amore et al., 2014). Concurrently, recent research indicates that the number of non-family female directors on corporate boards is growing, and this increase is happening at a faster pace than that of family female directors (Solimene et al., 2017). As female representation on corporate boards continues to grow, understanding the influence of female directors' family affiliations becomes increasingly important for assessing the impact of board gender diversity.

Despite the significance of director's family affiliation in the boardroom, the extant literature provides limited insights into how this factor influences the effects of board gender diversity on firm outcomes. Some scholars argue that family female directors face unique challenges, as conservative gender norms embedded in family relationships often spill over into board interactions, shaping expectations and behaviours that undermine their legitimacy and constrain their contributions (Herdhayinta et al., 2021; Overbeke et al., 2013). Empirical evidence offers some support for this view, showing that the positive effect of board gender diversity on firm performance is driven primarily by the presence of non-family female directors on the board, whereas the relationship between the presence of family female directors and firm financial performance is negative (González et al., 2020; Herdhayinta et al., 2021). However, these findings are primarily drawn from emerging market contexts, making it difficult to disentangle the effects of gender diversity from those of the broader institutional environment.

An alternative perspective suggests that familial ties can themselves serve as a source of legitimacy, enabling female directors to access leadership roles and exert influence on corporate decisions (Maseda et al., 2022; Singh et al., 2015). Both qualitative and quantitative studies indicate that, under certain conditions, female family members can wield considerable power and influence within family businesses, suggesting that gender barriers stemming from a director's family affiliation can be effectively surmounted (Cruz et al., 2019; Deng, 2015; Hamilton, 2006). This view suggests that female directors' family affiliations may, in some cases, enhance the positive effects of board gender diversity on firm performance.

To bridge these two seemingly opposing views, we adopt a 'doing gender' perspective (West and Zimmerman, 1987), which conceptualizes gender as a continuous social practice, the meaning, significance, and consequences of which differ for individuals and groups across contexts (West and Zimmerman, 2009). According to this view, gendered identities are fluid and flexible across time and space (Nentwich and Kelan, 2014), allowing individuals to embody multiple facets of masculinity and femininity, depending on the context (Byrne et al., 2021). Furthermore, since gender is socially constructed, it can also be reshaped or deconstructed – gendered institutions can evolve, and the social interactions that sustain them can be altered (West and Zimmerman, 2009) or dismantled (Deutsch, 2007).

Applying this perspective, we propose that different categories of female directors of the board may enact and interpret gender roles differently, and that this variation

can influence the extent to which firms benefit from gender diversity. This approach shifts away from viewing gender as a fixed variable, offering a more nuanced explanation of the mixed findings on the performance effects of gender diversity. In doing so, it allows us to explore how family dynamics and gender roles interact to shape outcomes for a firm.

We argue that for female directors to gain legitimacy and effectively influence board decisions, they must construct their directorship identities in alignment with the social contexts in which they operate (Bryans and Mavin, 2003). Given the inherently masculine nature of corporate leadership (Gabaldon et al., 2016; Terjesen et al., 2009), female directors may need to 're-do' gender by challenging the traditional gender norms and constructing a hybrid identity that balances femininity with elements of masculinity (Billing, 2011; Frenkel, 2008; Kutlu and Ngoasong, 2023). This new identity, as it differs from traditional gendered notions of both femininity and leadership (Pini, 2005), can be challenging to navigate and may expose women to stigma or social sanctions from those who uphold gender hierarchies (Bryans and Mavin, 2003; Pini, 2005). Successfully navigating these challenges requires significant agency and ongoing negotiation with stakeholders (Mavin et al., 2014; Mavin and Grandy, 2012).

However, this process of enacting a female director identity may not be identical for family and non-family female directors. The gendered nature of family relationships (Byrne et al., 2019) can make it particularly complex for women to negotiate their identities as female directors, as they must balance expectations in both business and family domains (Hytti et al., 2017). This duality may be reflected in the varying impacts of board gender diversity on firm outcomes.

## HYPOTHESES DEVELOPMENT

### **The Role of Family Affiliation in the Impact of Board Gender Diversity on Firm Financial Performance**

Navigating professional settings as a female director requires not only professional competence but also the ability to do gender, which involves actively constructing and negotiating one's gendered identity (Byrne et al., 2021; Pini, 2005). Family and non-family female directors often operate in distinct social contexts that shape how they construct their identities as female directors, which is ultimately reflected in the board's ability to leverage the performance benefits of gender diversity. Family female directors, who must balance the conflicting fundamental assumptions associated with family and business contexts, may face additional challenges when constructing their identity on the board (Byrne et al., 2021; Calabrò et al., 2023). In contrast, non-family female directors, less constrained by family-imposed gender norms, may have greater agency to shape and redefine their female director identity. These differences in how family and non-family female directors do gender on the board may lead to distinct impacts on firm financial performance.

Research highlights that family firms often uphold traditional values and maintain a paternalistic culture, with rigid expectations regarding gender roles (Bennedsen et al., 2007; Calabrò et al., 2018; Kubíček and Machek, 2019; Wang, 2010). Historically, female

family members in such firms have held more supportive roles with limited decision-making power; their focus on providing emotional support to the family can mean that their business contributions remain informal or overlooked (Byrne et al., 2021). In contrast, male family members typically assume leadership roles within businesses (Bettinelli et al., 2019; Martínez Jimenez, 2009).

Due to these enduring gendered expectations (Calabrò et al., 2018; Kubíček and Machek, 2019), family female directors are often perceived more as 'family delegates' than as business leaders and are expected to prioritize family welfare, even if it conflicts with financial and business priorities (Campopiano et al., 2019; Poletti-Hughes and Martínez Garcia, 2020). These directors also tend to have less exposure to business operations than their male counterparts, resulting in fewer opportunities to develop relevant skills and expertise (Hytti et al., 2017). Such dynamics reinforce stereotypes and biases that can undermine the credibility and legitimacy of female family directors in leadership roles (Constantinidis and Nelson, 2009). Moreover, their deep-rooted socialization into traditional family roles may make family female directors less willing to challenge gender norms via the enactment of the female director identity.

In contrast, non-family female directors may possess more agency in establishing their legitimacy within the boardroom. Their entry into directorship is typically based on merit, as they compete with other qualified candidates in the labor market (Bettinelli, 2011; Debellis et al., 2022), which grants them broader experiences and expertise (Bianco et al., 2015; Singh et al., 2015). This competitive background enables them to construct and assert their directorship identity, thereby enhancing their legitimacy within the board. Additionally, as outsiders to the family, non-family female directors may have more freedom to challenge traditional gender roles, offering them an opportunity to 're-do' gender and instigate change in gender norms within the boardroom. Consequently, non-family female directors may face fewer barriers while having more agency to construct their workplace identity. This allows them to extend their role beyond being a conduit of family interests and to protect the interests of a broader range of stakeholders, including those of non-family shareholders (Herdhayinta et al., 2021).

Based on the arguments above, family female directors may face greater challenges when enacting a female director identity on the board. In contrast, non-family female directors may have greater flexibility and discretion to redefine conventional gender roles without experiencing negative repercussions, allowing them to gain legitimacy and influence more effectively. As a result, the impact of female directors on firm performance may differ based on their family affiliation, with non-family female directors contributing more positively to firm financial performance than their family counterparts. Accordingly, we propose the following hypothesis:

*Hypothesis 1:* There is a more positive relationship between the percentage of non-family female directors and firm financial performance than between the percentage of family-affiliated female directors and firm financial performance.

## The Role of Family Male Directors in Shaping the Gendered Identities of Family Female Directors

In exploring the complex dynamics of family relationships on corporate boards, we extend our analysis beyond a simple binary categorization of female directors as family or non-family. Instead, we examine the conditions under which directors' family affiliation affects firm financial performance, with a particular focus on the role of family male directors. Because gender norms are socially constructed, context dependent, and enacted through interaction, men play a critical role in shaping women's gendered identities (West and Zimmerman, 1987). Recent scholarship further shows that when women enter male-dominated teams, they not only bring distinct qualities but also elicit behavioural changes in men – changes that are contingent on the characteristics of both men and women and that critically affect team outcomes (Post et al., 2024). Building on these insights, we propose that a higher representation of male family directors serves as a facilitating mechanism to perpetuate traditional gender norms, creating significant barriers for family female directors in constructing and redefining their gendered identities. These barriers hinder female directors' ability to contribute effectively, ultimately leading to lower firm performance. Conversely, when the presence of male family directors is limited or absent, family female directors face fewer constraints in establishing their gendered identity, allowing them to engage more fully in board decision making and contribute positively to firm performance.

Rooted in the dynamic nature of gender construction, as elucidated by the 'doing gender' perspective (Hytti et al., 2017; West and Zimmerman, 1987), we posit that family relationships within boards help sustain and reinforce family gender norms in organizational settings. Existing research points to inherent gender inequalities in family dynamics, such as sibling rivalries (Constantinidis and Nelson, 2009; Nelson and Constantinidis, 2017) and father-daughter relationships in family business leadership (Haberman and Danes, 2007). These studies suggest that female family members face greater challenges in legitimizing their leadership roles than do their male relatives.

The presence of male family directors on the board implies close interactions between male and female family members and a blending of professional and family relationships. Given long-standing exposure to family gender norms, these gender dynamics are likely to persist at the board level, posing challenges for family female directors in constructing their gendered identities. These challenges hinder female directors' contributions to the board, which may in turn lead to a negative impact on firm financial performance.

In contrast, a lower presence of male family directors weakens the influence of entrenched family gender norms on board dynamics. This reduced presence alleviates the barriers faced by family female directors, providing them with more discretion to construct their identities and establish their legitimacy within the board. This in turn enables them to leverage their human and social capital more effectively in the decision-making process. Evidence in support of this argument is provided by numerous accounts of female leaders in family businesses in which the absence of male family candidates for leadership roles has been a significant factor in enabling female family members to access and effectively execute leadership roles (Constantinidis and Nelson, 2009; Curimbaba, 2002; Custódio and Siegel, 2020). Thus, fewer male family directors on the board can create

an environment in which family female directors face fewer constraints, allowing them to navigate their gendered identities more freely and ultimately enhance their contribution to firm financial performance.

Based on these arguments, we contend that the influence of female directors' family affiliations on firm performance is shaped by the family gender norms at play within the board, maintained through the presence of family male directors. A higher representation of male family members is likely to reinforce traditional gender norms, restricting the family female director's ability to construct and enact her identity as a female board member and, in doing so, produce a negative impact on firm financial performance. In contrast, a lower presence or an absence of male family directors creates a more supportive environment in which family female directors can challenge and redefine traditional gender norms, enabling them to construct their identities as female directors and enhance firm performance outcomes. This dynamic moderates the relationship between female directors' presence on the board and firm financial performance, paving the way for the following hypothesis:

*Hypothesis 2:* The relationship between the percentage of family female directors and firm financial performance is moderated by the presence of male family directors, such that when the percentage of male family directors is high, the relationship is negative, whereas when their percentage is low, the relationship is positive.

## METHODOLOGY

### Data and Sample

Our initial sample consisted of the entire population of Italian industrial family firms listed on the EXM (former Mercato Telematico Azionario), the leading Italian equity market dedicated to midsize and large companies, during the period from 2012 to 2019 – following the introduction of the gender quota law. The population of the MTA segment totalled 242 by the end of 2019, encompassing both family and non-family firms. Consistent with previous research examining the nexus between board gender diversity and financial performance (Bennouri et al., 2018; García-Meca and Santana-Martín, 2023), we refined our initial sample of 242 family and non-family firms. More specifically, we excluded 55 non-family firms and 42 family firms from the financial industry, a necessary step considering the distinct performance metrics and regulatory frameworks inherent in financial firms compared to non-financial firms (Anderson and Reeb, 2003; Beuselinck and Du, 2017). Additionally, we eliminated 18 observations with incomplete financial and governance data, which resulted in a final sample of 127 family firms.

Data on the boards' structures were collected manually from publicly available annual reports, the website of the Italian Stock Exchange, and from Consob (Commissione Italiana per le Società e la Borsa), the Italian authority for listed companies and the stock exchange. Financial data were sourced from Thomson Reuters Datastream, which is recognized as one of the most reliable and updated sources for financial information on listed companies.

Italy represents a rich and analytically useful context for examining the effects of board gender diversity on firm performance. First, Italian culture is characterized by

deeply traditional gender roles, reflected in one of the widest gender gaps in Europe (EIGE, 2022). At the same time, the introduction of the Golfo-Mosca Law led to a sharp increase in female board representation, from 7 per cent in 2010 to 34 per cent in 2017 (Bruno et al., 2017), primarily through the entry of non-family female directors. This shift created substantial variation in board gender composition, enabling a rigorous test of our hypotheses. In addition, the dominance of family-controlled firms (Aganin and Volpin, 2005; Prencipe et al., 2011) ensures a large and representative sample, while Italy's governance framework remains broadly comparable to other Western economies. Taken together, these features make Italy a particularly suitable setting for examining how family-induced gender norms shape directors' behaviour on boards. The coexistence of strong family institutions, traditional gender roles, and a rapidly changing regulatory environment provides a natural laboratory for testing the 'doing gender' perspective in family firm governance. Following previous studies on listed Italian family companies (Cambrea et al., 2022; Minichilli et al., 2016), we operationalized family firms as firms in which the founder and/or family members held more than 25 per cent of the shares. This threshold was adopted because of the highly concentrated ownership of Italian firms (Amore et al., 2011). In contrast to other institutional contexts in which a firm may be controlled via a lower percentage of share capital, in a concentrated financial market such as Italy, where a firm is typically owned by a limited number of shareholders, a 25 per cent stake is required to obtain control (Calabrò et al., 2018; Miller et al., 2014).

### Dependent Variable

The study's dependent variable was *return on assets* (ROA), which is computed as earnings before interest and taxes (EBIT) divided by the book value of total assets (Amore et al., 2014; Arrondo-García et al., 2016). This variable has been widely used in studies on the impact of female directors on firm performance (e.g. Liu et al., 2014; Nekhili et al., 2018; Xing et al., 2021), and its use in this study is further supported by the extensive use of ROA as an appropriate proxy to capture the financial performance of family firms (Amore et al., 2014; Minichilli et al., 2016).

### Independent Variables

Women's representation on the board (labelled *Female directors*) was operationalized as the number of female directors divided by the total board size. To empirically test our first hypothesis, we further distinguished between the percentage of family female directors (labelled *Family females*) and non-family female directors (labelled *Non-family females*). These variables were calculated as the number of *family* or *non-family female directors*, respectively, divided by the total number of directors on the board. Non-family female directors were identified based on the firm's classification of directors as independent.<sup>[1]</sup> We then replicated Calabrò et al.'s (2018) methodology of inspecting the profile of each female director not identified as an independent director; this profile was based on information gathered from press articles, official company websites, corporate books detailing the family structure, and social networks (e.g. LinkedIn). In line with Cruz et al. (2019), the family relationships of female directors were identified by inspecting their surnames. In Italy women retain their maiden name after marriage, although they can add their husband's surname

to the end of their name. To detect relatively rare cases in which women may have decided to use their husband's name socially, we manually collected the curriculum vitae (CV) of all female directors appointed between 2012 and 2019 and inspected both individuals' and companies' LinkedIn pages to verify whether a name change had occurred. We classified a director as family if she was (1) the controlling or a significant shareholder of the listed company or (2) a close relative of the latter, being one's wife, daughter, granddaughter, sister, cousin, aunt, or niece. If the profile did not confirm either of the two conditions, the director was then classified as a non-family female director.

To examine Hypothesis 2, we subsequently distinguished between family female directors by considering the presence of male family members on the board. Accordingly, we considered a continuous moderating variable named *Family male directors*, which measures the percentage of family male directors on the board.

### Control Variables

We controlled for the following variables, each of which the corporate governance literature has shown to be associated with firm performance: *Firm size* is measured as the logarithm of total assets (Cruz et al., 2019); *Leverage* is the ratio of debt to total assets (Dezső and Ross, 2012); *Cash holdings* is the ratio of cash and cash equivalents to total assets (Cambrea et al., 2022); and *Board size* is the total number of members who sit on the board of directors (Conyon and He, 2017). We also included *Firm age*, which was measured in years and subsequently logarithmized (Cruz et al., 2019). *Cash flow* was calculated as the cash flow divided by the total assets (Jurkus et al., 2011). *Dividend* was computed as a dummy variable; it took a value equal to one if the company pays dividends and zero otherwise (Perryman et al., 2016). *Family ownership* is a continuous variable that captures the percentage of family voting rights in a firm (Cruz et al., 2019). *R&D* is computed as research and development expenses divided by total sales (Bennouri et al., 2018) – we coded the firm's R&D expenditure as zero if it was missing (Miller et al., 2007). Finally, *Capex* is a proxy for a firm's capital expenditures and is computed as capital expenditures divided by total assets (Ahern and Dittmar, 2012).

## RESULTS

### Descriptive Statistics and Correlations

Table I presents the main descriptive statistics for the entire sample of family firms under investigation and Table II shows the correlations among the variables used in the econometric analysis.

The findings indicate acceptable levels of correlation among all the variables of the empirical models. We also computed the variance inflation factor (VIF) values among all the independent variables (not reported for brevity); these reached a mean value of 2.60, indicating no evidence of multicollinearity.

In our sample, female directors comprise 25.6 per cent of all board members. Of these, the majority are non-family female directors, representing 19 per cent of the total board size, consistent with prior evidence (Cruz et al., 2019). Family female

Table I. Descriptive statistics

<i>Variables</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Min</i>	<i>Median</i>	<i>Max</i>
ROA	0.026	0.136	-0.748	0.028	2.276
Industry-adjusted ROA	0.002	0.129	-0.690	-0.000	2.076
Female directors	0.256	0.119	0.000	0.267	0.545
Family females	0.066	0.086	0.000	0.000	0.500
Non-family females	0.190	0.133	0.000	0.200	0.500
Family male directors	0.196	0.129	0.000	0.182	0.625
Firm size	19.780	1.599	14.920	19.765	25.081
Leverage	0.295	0.183	0.000	0.287	1.908
Cash holdings	0.134	0.129	0.000	0.105	0.940
Board size	9.417	2.895	2.000	9.000	20.000
Firm age	3.427	0.637	1.099	3.434	5.056
Cash flow	0.054	0.091	-0.637	0.056	0.360
Dividend	0.597	0.491	0.000	1.000	1.000
Family ownership	0.584	0.143	0.000	0.587	0.973
R&D	1.130	8.663	0.000	0.000	9.911
Capex	3.364	5.989	0.000	2.150	21.220

directors make up 6.6 per cent of directors (see Figure 1 for details). For comparison, family male directors account for 19.6 per cent of board members, while non-family male directors constitute the largest group at 54.8 per cent. Taken together, board composition remains largely dominated by men, particularly those without family affiliations.

Changes in board gender diversity (Figure 1) reveal a significant increase in the percentage of female directors, which rose from 12.2 per cent in 2012 to 36 per cent in 2019. It is also evident that the representation of different categories of female directors has not grown proportionally. Non-family female directors mainly drive this upward trend; in contrast, the proportion of women affiliated with family shareholders has remained almost constant. This sharp increase of non-family female directors, facilitated by the adoption of a board gender quota, may indicate that Italian family firms respond to the pressure to include more women on the board by recruiting outside the family and, in doing so, contribute to the creation of a labour market for female directors.

### Empirical Analysis

Table III shows the fixed-effects estimates for our research hypotheses, with ROA as the dependent variable. We employed a fixed-effects panel model to control for time-invariant heterogeneity (Adams et al., 2010) and unobservable factors (Dezsó and Ross, 2012). Each regression included all the above-mentioned control variables,

Table II. Correlation matrix

Variables	1	2	3	4	5	6	7	8
1 ROA	1							
2 Industry-adjusted ROA	0.931***	1						
3 Female directors	0.0365	-0.0597	1					
4 Family females	0.0140	0.00643	0.198***	1				
5 Non-family females	0.0239	-0.0580	0.774***	-0.467***	1			
6 Family male directors	0.0296	0.000560	-0.206***	-0.0221	-0.172***	1		
7 Firm size	0.178***	0.167***	-0.0917*	-0.136***	0.00516	-0.0840*	1	
8 Leverage	-0.234***	-0.217***	0.00340	-0.118**	0.0791*	-0.0727*	0.0375	1
9 Cash holdings	0.0269	0.0125	-0.00980	-0.0620	0.0312	-0.101**	-0.00937	-0.113**
10 Board size	0.0908*	0.0939*	-0.0172	-0.0487	0.0159	-0.213***	0.588***	-0.0655
11 Firm age	0.0470	0.0298	-0.00967	0.110**	-0.0798*	0.122***	0.172***	0.0297
12 Cash flow	0.640***	0.580***	0.0280	0.0489	-0.00629	0.143***	0.268***	-0.202***
13 Dividend	0.354***	0.280***	0.00237	0.0309	-0.0178	-0.0612	0.405***	-0.198***
14 Family ownership	0.187***	0.129***	-0.0112	0.195***	-0.136***	0.221***	-0.110**	-0.129***
15 R&D	-0.313***	-0.285***	-0.0250	-0.0578	0.0148	-0.111**	-0.0925*	-0.130***
16 Capex	0.0758*	0.0477	0.120**	0.00758	0.103**	0.0120	-0.00190	-0.0568

1 ROA	9	10	11	12	13	14	15	16
2 Industry-adjusted ROA								
3 Female directors								
4 Family females								
5 Non-family females								

(Continues)

Table II. (Continued)

	9	10	11	12	13	14	15	16
6 Family male directors								
7 Firm size								
8 Leverage								
9 Cash holdings	1							
10 Board size	-0.0317	1						
11 Firm age	0.0404	0.0637	1					
12 Cash flow	-0.159***	0.131***	-0.0172	1				
13 Dividend	0.139***	0.297***	0.0476	0.404***	1			
14 Family ownership	0.0227	-0.159***	0.138***	0.0651	0.0827*	1		
15 R&D	0.189***	0.0773*	-0.0480	-0.424***	-0.0572	-0.139***	1	
16 Capex	0.000563	0.0283	-0.0495	0.119**	0.0606	0.0696	0.0419	1

Note: N = 755.

\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05.

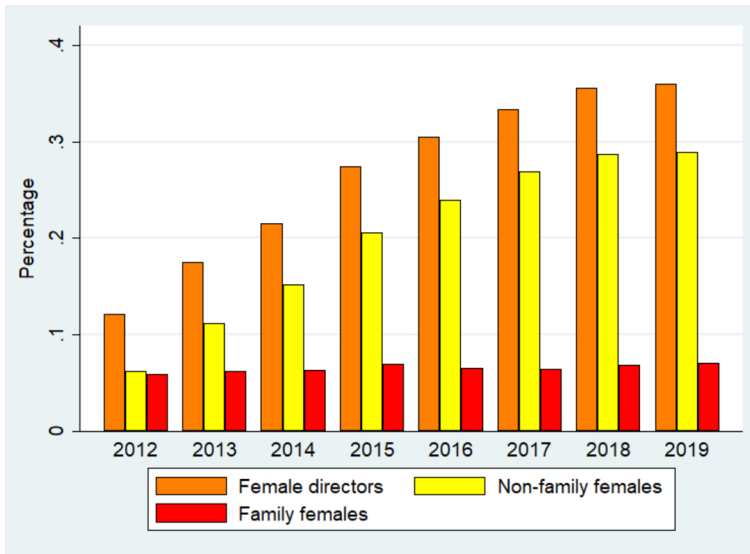


Figure 1. Mean of family and non-family female directors by years

along with year dummies to account for temporal effects (Ferrari et al., 2021; Wooldridge, 2015; Xing et al., 2021). To mitigate endogeneity concerns, we lagged all explanatory variables by 1 year (Amore et al., 2014; Ferrari et al., 2021; Green and Homroy, 2018).

Table III presents our main findings. Model 1 estimates the overall impact of board gender diversity on firm performance. The results show a significant positive relationship between the proportion of female directors on the board and corporate performance ( $\beta=0.199$ ,  $p=0.003$ ). In Model 2, we examine whether female directors' family affiliations influence the relationship between board gender diversity and firm performance by disaggregating female directors into two categories, *Family females* and *Non-family females*. Due to the high correlation between the proportion of female directors and the proportion of family and non-family female directors, we did not use the interaction term but instead tested the direct effects of each category of female directors and compared the coefficients. This approach is in line with prior studies on female directors' characteristics and firm outcomes (cf. Cruz et al., 2019; González et al., 2020; Herdhayinta et al., 2021). The results depicted in Model 2 reveal that the percentage of non-family female directors is positively associated with ROA ( $\beta=0.228$ ,  $p=0.001$ ), while the percentage of family females is not statistically significant ( $\beta=-0.090$ ,  $p=0.540$ ). A statistical test comparing the two coefficients confirms a significant difference between the two coefficients at the 5 per cent level, providing support for Hypothesis 1. These findings suggest that the presence of non-family female directors has a stronger positive relationship with firm financial performance than that of family-affiliated female directors.

However, the non-significant direct effect of family female directors on firm performance observed in Model 2 should be interpreted with caution, as it captures the average effect across all levels of the moderator and thus does not take into consideration the conditional dynamics revealed in Hypothesis 2 – that the effect of family-affiliated female directors

Table III. Effects of female directors on firm performance

Variables	ROA				
	(1)	(2)	(3)	(4)	(5)
Female directors	0.199** (0.003)				
Family females		-0.090 (0.540)	0.286 (0.108)		0.348 <sup>†</sup> (0.062)
Non-family females		0.228** (0.001)		0.098 (0.233)	0.141 <sup>†</sup> (0.098)
Family male directors			0.600*** (0.000)	0.464*** (0.000)	0.601*** (0.000)
Family females × Family males			-1.813** (0.005)		-1.825** (0.007)
Non-family females × Family males				0.220 (0.412)	0.027 (0.922)
Firm size	-0.062*** (0.000)	-0.065*** (0.000)	-0.054*** (0.000)	-0.053*** (0.000)	-0.051*** (0.000)
Leverage	0.703*** (0.000)	0.704*** (0.000)	0.681*** (0.000)	0.677*** (0.000)	0.672*** (0.000)
Cash holdings	0.350*** (0.000)	0.348*** (0.000)	0.222** (0.003)	0.226** (0.003)	0.234** (0.002)
Board size	-0.001 (0.782)	-0.001 (0.883)	0.007 <sup>†</sup> (0.082)	0.006 <sup>†</sup> (0.097)	0.007 <sup>†</sup> (0.079)
Firm age	0.064 (0.456)	0.083 (0.331)	0.123 (0.104)	0.120 (0.117)	0.103 (0.179)
Cash flow	0.635*** (0.000)	0.619*** (0.000)	0.572*** (0.000)	0.548*** (0.000)	0.555*** (0.000)
Dividend	0.026 (0.125)	0.027 (0.113)	0.034* (0.024)	0.030** (0.044)	0.033* (0.030)
Family ownership	-0.011 (0.846)	-0.009 (0.882)	-0.199*** (0.000)	-0.179** (0.001)	-0.192*** (0.000)
R&D	-0.001 <sup>†</sup> (0.086)	-0.001 <sup>†</sup> (0.079)	-0.001* (0.037)	-0.002* (0.025)	-0.001* (0.030)
Capex	0.001 (0.186)	0.001 (0.156)	0.002** (0.009)	0.002** (0.018)	0.002* (0.017)
Constant	0.716 <sup>†</sup> (0.089)	0.713 <sup>†</sup> (0.088)	0.317 (0.396)	0.313 (0.403)	0.310 (0.405)
Fixed effects	Yes	Yes	Yes	Yes	Yes

(Continues)

Table III. (Continued)

Variables	ROA				
	(1)	(2)	(3)	(4)	(5)
Year dummies	Yes	Yes	Yes	Yes	Yes
R-squared	0.314	0.319	0.394	0.392	0.400
Number of Id	127	127	127	127	127
Observations	755	755	755	755	755

Note: Robust pval in parentheses.  
 \*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05; †p < 0.10.

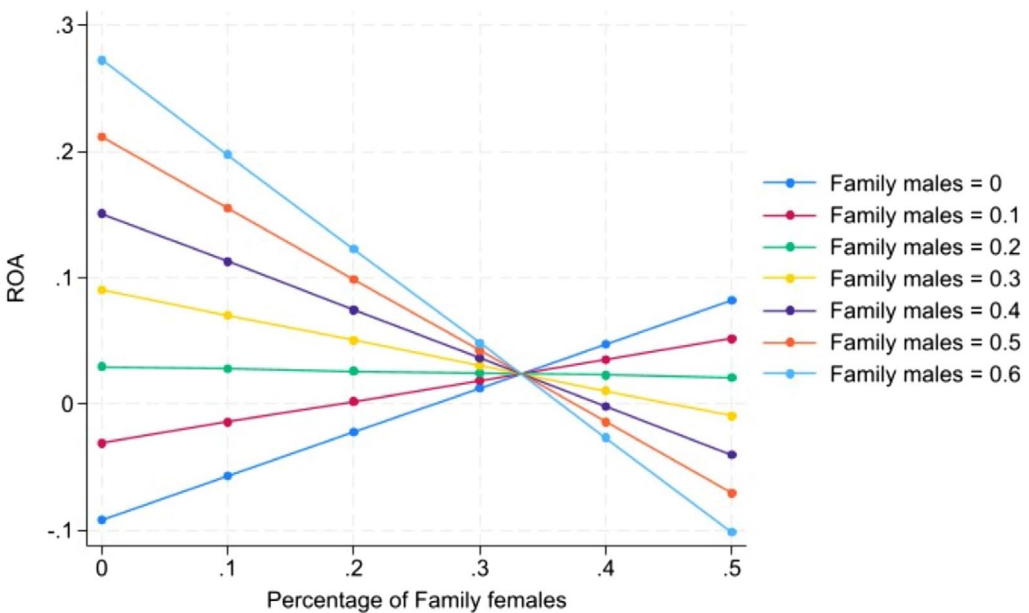


Figure 2. Family firms' performance, family female directors, and family male directors

on firm performance is conditioned on the presence of male family directors. Following best practices for the interpretation of main effects in models with moderators (Aguinis et al., 2017; Busenbark et al., 2022), we turn to fully specified Model 5. In this model, the interaction term between family female directors and family male directors is negative and statistically significant ( $\beta = -1.825$ ,  $p = 0.007$ ), indicating that the relationship between the presence of family female directors and firm performance is indeed contingent on the presence of male family members on the board. When inspecting the direct effect of family female directors, our analysis shows that when no male directors are present, the relationship between family female directors and firm performance is positive and statistically significant ( $\beta = 0.348$ ,  $p = 0.062$ ). To further interpret this interaction, we created the marginal effects plot presented in Figure 2, which depicts the relationship between the percentage of family

female directors and firm performance at different levels of representation of male family directors on the board. Specifically, when the percentage of male family directors is low, the relationship between family female directors and firm performance is positive. However, as the percentage of male directors on the board increases, this relationship becomes insignificant and eventually negative. These findings support Hypothesis 2, indicating that the relationship between the percentage of family female directors and firm financial performance is moderated by the presence of male family directors. Interestingly, the interaction term between family male directors and non-family female directors is not significant, suggesting that the presence of male family members does not systematically affect the relationship between non-family female directors and firm performance. This result aligns with our theoretical expectation that non-family female directors, being less embedded in family dynamics, are less subject to the gendered roles reinforced by family male directors.

### Robustness Tests

In this section, we describe additional analyses that were performed to ensure the robustness of our empirical findings.

*Alternative model specifications and different empirical methodologies.* In Table IV, we re-estimated the regressions presented in Table III using a different performance measure. As operating performance can be affected by sector, we used an adjusted index by sector, named *industry-adjusted ROA* (Miller et al., 2014), which was calculated as the firm's ROA less the average ROA of the industry, according to the Italian Stock Exchange's industry classification. The empirical findings shown in Table IV largely confirm our primary results.

To ensure that both the industry-specific performance differences and the more conservative approach of some industries did not affect the empirical findings, we applied the random-effects panel methodology, which allowed us to control for the industry affiliation of each investigated firm. We repeated the main analyses shown in Table III, and the empirical findings, not tabulated for brevity, were qualitatively identical to those of the fixed-effects model.

Furthermore, we re-ran our main model employing revenue growth (measured as sales in year  $t$  minus sales in year  $t-1$  divided by sales in year  $t-1$  of the company) as an alternative measure for our dependent variable. The empirical tests of Hypothesis 1 and Hypothesis 2 (not reported here for brevity) did not yield statistically significant outcomes. This suggests that our conclusions should be interpreted with caution, as they might be influenced by the choice of the dependent variable in the econometric analyses. The lack of significance can be attributed to the differences in the performance domains captured by the two proxies. Recent studies have emphasized significant differences among various performance indicators, with ROA identified as the most robust measure of firm financial performance (Yousaf and Dey, 2022). Consequently, revenue growth may not capture the same dimensions of firm financial performance as ROA; thus, comparable results should not be expected (Richard et al., 2009; Tang, 2017).

To further assess whether multicollinearity affects our findings, we re-estimated the full model with only the dependent variable, independent variables, and interaction terms.

Table IV. Effects of female directors on firm performance – Industry-adjusted ROA

<i>Variables</i>	<i>Industry-adjusted ROA</i>				
	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
Female directors	0.193** (0.003)				
Family females		-0.110 (0.437)	0.291 <sup>†</sup> (0.093)		0.331 <sup>†</sup> (0.068)
Non-family females		0.226** (0.001)		0.076 (0.337)	0.117 (0.158)
Family male directors			0.570*** (0.000)	0.397*** (0.000)	0.538*** (0.000)
Family females × Family males			-2.000** (0.002)		-1.928** (0.003)
Non-family females × Family males				0.360 (0.168)	0.165 (0.540)
Firm size	-0.056*** (0.000)	-0.058*** (0.000)	-0.048** (0.001)	-0.047** (0.001)	-0.045** (0.001)
Leverage	0.654*** (0.000)	0.657*** (0.000)	0.635*** (0.000)	0.628*** (0.000)	0.624*** (0.000)
Cash holdings	0.345*** (0.000)	0.343*** (0.000)	0.225** (0.002)	0.226** (0.002)	0.234** (0.002)
Board size	-0.002 (0.680)	-0.001 (0.764)	0.005 (0.144)	0.005 (0.189)	0.005 (0.161)
Firm age	0.052 (0.531)	0.069 (0.400)	0.107 (0.148)	0.107 (0.151)	0.091 (0.221)
Cash flow	0.550*** (0.000)	0.537*** (0.000)	0.498*** (0.000)	0.471*** (0.000)	0.479*** (0.000)
Dividend	0.028 <sup>†</sup> (0.087)	0.028 <sup>†</sup> (0.083)	0.035* (0.016)	0.031* (0.033)	0.034* (0.022)
Family ownership	-0.029 (0.608)	-0.025 (0.650)	-0.204*** (0.000)	-0.183** (0.001)	-0.197*** (0.000)
R&D	-0.001 (0.187)	-0.001 (0.179)	-0.001 (0.114)	-0.001 <sup>†</sup> (0.072)	-0.001 <sup>†</sup> (0.085)
Capex	0.001 (0.142)	0.001 (0.118)	0.002** (0.006)	0.002* (0.016)	0.002* (0.014)
Constant	0.658 (0.104)	0.654 (0.104)	0.290 (0.426)	0.285 (0.435)	0.282 (0.436)
Fixed effects	Yes	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes	Yes

(Continues)

Table IV. (Continued)

Variables	Industry-adjusted ROA				
	(1)	(2)	(3)	(4)	(5)
R-squared	0.294	0.300	0.374	0.371	0.381
Number of Id	127	128	127	127	127
Observations	755	741	737	737	737

Note: Robust pval in parentheses.

\*\*\*p < 0.001;

\*\*p < 0.01;

\*p < 0.05;

†p < 0.10.

The results, not reported here for brevity, remained unchanged, suggesting that multicollinearity is unlikely to be a concern.

Finally, given the limited pool of family female directors, a relatively large proportion of firms in our sample (48.48 per cent) do not have any family female representation on their boards. To ensure that our results are not driven by this large subgroup, we re-estimated the full model on a subsample of family firms with at least one family female director on the board. The results, not reported here for brevity, are fully consistent with our main findings.

*Propensity score matching and 2SLS estimates.* Although our findings proved robust to several checks, concerns about endogeneity remained. To mitigate such problems, we conducted propensity score matching (PSM) and applied instrumental variables (Amore et al., 2014).

Recent studies on heterogeneity among family firms (Chua et al., 2012) have argued that such firms may differ in goals and governance (Daspit et al., 2018; Nordqvist et al., 2014), as well as in the level of gender homogeneity of their boards (Solal and Snellman, 2019). To confirm that our findings on the relationship between board gender diversity and firm performance are not driven by differences in unobservable characteristics across family firms or reverse causality, we followed previous studies on board gender diversity (Amore et al., 2014; Atif et al., 2021; Nekhili et al., 2020) and employed the PSM procedure (Rosenbaum and Rubin, 1983).

As the first step, we followed Nekhili et al.'s (2020) approach and matched companies with family female directors (and zero non-family female directors) to a set of control firms with non-family female directors (and zero family female directors). We then predicted the probability that a company has at least one family female director on the board by running a logit model in which the dependent variable was the dummy variable (*D\_family\_female*, which equals one when at least one family female director sits on the board of directors and zero otherwise). The logit regression included as control variables both a measure of performance (ROA) and all the explanatory variables employed in the regressions in Table III. We also controlled for industry and year fixed effects in the logistic regression. Next, for each observation with family female directors, we identified an observation with non-family female directors based on the single nearest-neighbour method without replacement. We required that the maximum difference between the

propensity score of each firm-year observation and that of its matched peer not exceed 0.03 in absolute value (Nekhili et al., 2017, 2018). The PSM<sup>[2]</sup> produced a matched sample of 140 cases, 70 treatment and 70 control cases. To verify that firm-year observations with family female directors are similar to firm-year observations with non-family female directors, we examined the differences in the mean of each observable characteristic between the treatment and the control firm-year observations. The data in Panel B of Table VI show that the PSM removed all the observable differences in the explanatory variables between the treatment and control groups.

Finally, we estimated the regression presented in Model 2 of Table III based on the matched sample of firm-year observations. The results are shown in Panel A of Table V.

Overall, the results based on a subsample of matched firms confirm our main findings (Table III) and suggest that our empirical evidence is not driven by (observable) differences between firm-year observations with family female directors and those with non-family female directors on the boards.

To further address endogeneity issues, we used the two-stage least squares (2SLS) methodology. As we needed to test two different variables (*Family females* and *Non-family females*), employing 2SLS required at least two instrumental variables. Following previous studies (Chen et al., 2017; Solal and Snellman, 2019), we adopted the fraction of male directors linked to female directors (*Fraction of male directors*) and the average level of board diversity in the industry (*Industry diversity*). The first instrument was computed as the fraction of male directors on the board who sit on other boards with at least one female director (Adams and Ferreira, 2009; Levi et al., 2014), whereas the second was calculated as the percentage of all female board members in the industry for that year, excluding the board members of the focal firm (Liu et al., 2014).

Models 1 and 3 of Table VI report the results of the first-stage regression, where the dependent variables were the ratio of family female directors and non-family female directors, respectively. As expected, we found that both instruments were positively and significantly correlated with the fraction of both family and non-family female directors.

Models 2 and 4 of Table VI show the results for the second-stage regressions, in which the dependent variable was ROA. Both estimations confirm the main findings shown in Table III, supporting our hypotheses and suggesting that our main results are unlikely to be affected by the endogeneity of the percentage of family and non-family female directors.

## DISCUSSION AND CONCLUSIONS

This study sets out to unravel how directors' family affiliations influence the impact of board gender diversity on firm financial performance. Drawing on the 'doing gender' perspective (West and Zimmerman, 1987, 2009), we developed a theoretical framework, supported by empirical evidence, that explicates how female directors' gendered identities are shaped by their relations with the business-owning family. Our analysis reveals that family affiliation tends to reduce the positive effect of board gender diversity on firm financial performance,

Table V. Effects of female directors on family firm's performance – PSM

<i>Panel A: Regressions for matched sample</i>		
	(1)	(2)
<i>Variables</i>	<i>D_family_female</i>	<i>ROA</i>
Family females		0.042 (0.722)
Non-family females		0.176* (0.042)
ROA	-1.538 (0.450)	
Firm size	-0.219 <sup>†</sup> (0.098)	-0.017 (0.529)
Leverage	-2.998** (0.006)	0.064 (0.359)
Cash holdings	-2.440 (0.18)	0.128 (0.237)
Board size	-0.063 (0.361)	0.004 (0.423)
Firm age	0.524* (0.050)	-0.052 (0.770)
Cash flow	0.506 (0.879)	0.181 (0.129)
Dividend	0.742 <sup>†</sup> (0.074)	-0.009 (0.492)
Family ownership	3.553** (0.005)	-0.018 (0.865)
R&D	-0.026 <sup>†</sup> (0.074)	-0.002 (0.928)
Capex	-0.043 (0.450)	0.001 (0.596)
Constant	1.327 (0.602)	0.446 (0.555)
Observations	381	140
R-squared	0.331	0.245
Industry effects	Yes	No
Fixed effects	No	Yes
Year dummies	Yes	Yes

(Continues)

Table V. (Continued)

<i>Panel B: Mean difference test for the matched sample</i>				
<i>Variables</i>	<i>Treatment firms</i>	<i>Control firms</i>	<i>Difference</i>	<i>t-statistic</i>
Number of observations	70	70		
ROA	0.022	0.012	0.010	0.88
Firm size	19.411	19.209	0.202	0.82
Leverage	0.276	0.289	-0.013	-0.46
Cash holdings	0.122	0.119	0.003	0.24
Board size	8.729	8.529	0.200	0.44
Firm age	3.609	3.583	0.026	0.30
Cash flow	0.047	0.046	0.001	0.13
Dividend	0.586	0.514	0.072	0.85
Family ownership	0.618	0.639	-0.021	-1.12
R&D	0.555	0.188	0.367	1.32
Capex	2.715	2.609	0.106	0.23

*Note:* Robust pval in parentheses.

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ .

<sup>†</sup> $p < 0.10$ .

such that non-family female directors have a stronger positive effect on firm financial performance than their family counterparts. In examining the boundary conditions of the relationship between the presence of family female directors and firm performance, we identified the presence of male family members on the board as a mechanism for reinforcing traditional family gender norms, changing the impact of a female director's family affiliation on the relationship between board gender diversity and firm financial performance. Specifically, when no or few male family directors are present, the relationship between the presence of family female directors and firm financial performance is positive; however, as the presence of male family members on the board increases, the performance effect of family female directors diminishes and eventually turns negative. By contrast, non-family female directors' influence appears less affected by the presence of family male directors, highlighting that the interplay of kinship and gender norms is central to understanding board dynamics in family firms.

Our findings present several contributions to literature. First, we add to the ongoing debate on board gender diversity (Kirsch, 2018; Rigolini and Huse, 2021; Seierstad et al., 2017; Torchia et al., 2011) by underscoring the heterogeneity among female directors. Moving beyond the conventional 'gender-as-a-variable' view, we extend the emerging literature that explores the individual characteristics of female directors (Bennouri et al., 2018; Gull et al., 2018; Wang et al., 2021) by drawing attention to family affiliation and family relationships at the board as crucial elements in understanding the financial performance implications of board gender diversity. This

Table VI. Effects of female directors on family firm's performance – 2SLS

	(1)	(2)	(3)	(4)
	<i>First-stage</i>	<i>Second-stage</i>	<i>First-stage</i>	<i>Second-stage</i>
<i>Variables</i>	<i>% family female directors</i>	<i>ROA</i>	<i>% non-family female directors</i>	<i>ROA</i>
Fractions of male directors	0.128*** (0.000)			
Family females		-0.083 (0.722)		
Industry diversity			0.853*** (0.000)	
Non-family females				0.228** (0.004)
Firm size	-0.001 (0.674)	-0.071*** (0.000)	0.001 (0.887)	-0.064*** (0.000)
Leverage	0.016 (0.151)	0.720*** (0.000)	-0.012 (0.484)	0.702*** (0.000)
Cash holdings	-0.002 (0.906)	0.337*** (0.000)	0.007 (0.808)	0.348*** (0.000)
Board size	-0.001 (0.157)	-0.001 (0.828)	0.001 (0.579)	-0.001 (0.882)
Firm age	0.052** (0.006)	0.110 (0.203)	0.028 (0.333)	0.079 (0.354)
Cash flow	0.005 (0.829)	0.647*** (0.000)	0.044 (0.209)	0.618*** (0.000)
Dividend	0.003 (0.407)	0.029 <sup>†</sup> (0.086)	0.006 (0.306)	0.027 (0.108)
Family ownership	0.017 (0.178)	-0.013 (0.830)	-0.036 <sup>†</sup> (0.063)	-0.010 (0.862)
R&D	0.000 (0.808)	-0.001 (0.102)	-0.000 (0.519)	-0.001 <sup>†</sup> (0.077)
Capex	0.000 (0.211)	0.002 <sup>†</sup> (0.099)	0.000 (0.603)	0.001 (0.163)
Constant	-0.099 (0.286)	0.758 <sup>†</sup> (0.071)	-0.034 (0.810)	0.714 <sup>†</sup> (0.087)
Fixed effects	Yes	Yes	Yes	Yes
Year dummies	Yes	Yes	Yes	Yes
Number of Id	127	127	127	127
Observations	755	755	755	755

Note: Robust pval in parentheses.

\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05.

<sup>†</sup>p < 0.10.

nuanced approach helps clarify the diverse effects associated with the presence of gender diversity on firm outcomes that have been demonstrated by prior research.

Second, our research advances the understanding of the gendered dimension of familiness in family business literature (Byrne et al., 2021; Heinonen and Hytti, 2011). We introduce a theoretical framework and provide empirical evidence illustrating how family gender roles may perpetuate the unequal treatment of women in the upper echelons of family firms. This may in turn lead to a lack of legitimacy, prompting women to assume subordinate roles and give preference to male family members, ultimately undermining their contribution on the board. This dynamic is particularly pronounced in contexts where family gender norms are salient.

Furthermore, by identifying the presence of male family members on boards as an activating mechanism for family gender norms, our study contributes to reconciling the debate about the contribution of family female directors. Prior studies examining such directors theorized both positive (Bauweraerts et al., 2022; Singh et al., 2015) and negative effects (González et al., 2020; Herdhayinta et al., 2021). Our study bridges these two seemingly opposing perspectives, suggesting that family female directors can make a meaningful contribution to a family firm's financial performance, particularly when the number of male family directors is low. In contrast, the presence of male family members on the board activates the barriers that preclude family female directors from establishing their gender identity, undermining their legitimacy on the board and contributions to firm financial performance. In addition, our findings extend the literature on female directors' family affiliations (González et al., 2020; Herdhayinta et al., 2021) by demonstrating that the unique family-induced barriers to reaping the benefits of the board gender diversity present in family firms are not exclusive to emerging economies but may also manifest in the context of Western economies, such as Italy.

Last, our study lends support to the 'doing gender' perspective (Mussolino et al., 2019; West and Zimmerman, 1987). While the notion that gender is performed through situated interaction between males and females is widely acknowledged, comparatively few studies have examined the role of men in the performance of gender by women (Kelan, 2018; Post et al., 2024). Addressing the calls from previous research to further nuance the contextual determinants of doing gender (Nentwich and Kelan, 2014) and to theorize the role of men in shaping group gender dynamics (Post et al., 2024) our study ventures into this underexplored yet important area. Namely, we move beyond an isolated examination of gendered identity performances by women (Hytti et al., 2017) and by men (Byrne et al., 2019), demonstrating that men can be conduits of traditional gender norms across different social contexts, changing the gender dynamics at the group level. By analysing the interaction between the presence of women and men on corporate boards as being contingent on their characteristics, we propose that the strong social ties between female and male directors may activate gendered norms, transferring them from personal to professional settings. Conversely, the absence of personal ties allows female directors more agency in performing their gendered identity in professional settings, which is ultimately reflected in the varying effects of gender diversity on firm outcomes. This finding illuminates the role of social context, and particularly the complex interplay of personal characteristics of both women and men in gender dynamics (Post et al., 2024), highlighting gender performance as an outcome of interaction

rather than as a solitary act of the individual (Nentwich and Kelan, 2014; West and Zimmerman, 1987).

Our findings offer important implications for family business practitioners and investors. Specifically, they underscore the potential of non-family female directors to positively influence financial performance in family firms. To capitalize on this, family firms should prioritize recruiting qualified non-family female directors to mitigate the impact of traditional gender norms, which can undermine the benefits of board gender diversity. Incorporating such directors can foster a more inclusive board culture, enabling diverse perspectives to flourish and ultimately improving the board's contribution to firm performance.

In the ongoing public debate about gender diversity on corporate boards, our study highlights the need for a more nuanced approach. The results suggest that female directors are most effective in improving firm performance when fewer male family members are on the board. Thus, instead of focusing solely on the percentage of female directors, board consultants and nominating committees should carefully assess the balance of family representation on boards and create environments in which family female directors can operate with greater autonomy, free from the constraints of traditional family gender dynamics.

Relatedly, our results highlight the importance of raising awareness among male family directors, and family firms more broadly, about how entrenched family gender dynamics can inadvertently constrain the contributions of family female directors. To address this challenge, family firms should adopt measures that promote equitable and inclusive governance, while mitigating the influence of family hierarchy. In practice, this may involve appointing an independent facilitator for key decisions and integrating inclusivity and participation criteria into board evaluation metrics. These structural measures can be complemented by regular training on unconscious bias and inclusive leadership, as well as initiatives to encourage male allyship. Together, such efforts can help create board environments where family gender dynamics are recognized and managed, preventing them from undermining effective decision making.

Despite its contributions, our study has several limitations. First, we focused exclusively on firm financial results and did not examine other critical performance domains, such as firm and family goal attainment, ESG performance outcomes, business resilience, and long-term survival. Given that family female directors may prioritize performance dimensions more than non-family female directors (Campopiano et al., 2019), future research should broaden the analysis to include non-financial outcomes when exploring the interaction between directors' family affiliations and board gender diversity.

Second, our measurement of gender diversity has several limitations. Operationalizing gender diversity at the firm level prevented us from directly examining the behaviour of female directors, specifically how they construct and reconstruct their gender identities on the board. It also left us unable to make a direct comparison between family and non-family female directors. Furthermore, identifying family members based on shared surnames may have led to cases in which female directors were overlooked because they changed their maiden names for social reasons. Future studies utilizing individual-level data could provide a more detailed analysis of female directors' identities

and contributions, helping to further explain the firm-level patterns we observed. The application of qualitative methods based on experiential research designs, including interviews or case studies, could offer deeper insights into the lived experiences of family and non-family female directors, their affiliations with the owning families, and the influences of such directors on board dynamics. Such approaches could overcome the limitations of firm-level archival data by providing a richer understanding of how gender is performed and negotiated on corporate boards and its consequences for board dynamics and firm outcomes.

Additionally, our model did not account for other characteristics of female board members, such as committee involvement or a role as chairperson, that may influence their impact. Future studies could incorporate these demographic characteristics in combination with gender and family affiliation to provide a more nuanced understanding of the effects of board gender diversity.

Another limitation relates to the notion of a 'critical mass' of female directors. Prior research suggests that women may only exert full influence when at least three female directors serve on a board (Lefley and Janeček, 2024; Torchia et al., 2011). However, given the small pool of eligible family female directors, it is rare for family firms to reach this threshold. Unlike non-family directors, family female directors are drawn from a much smaller pool of candidates, constrained by both family size and the concentration of ownership within a limited number of family members. As a result, it is rare for three or more family female directors to serve on the same board. While our findings point to countervailing effects as the main explanation for the insignificant direct effect of family female directors, the scarcity of boards with a critical mass of family female directors may also play a contributing role. This limitation is difficult to overcome in practice, since contexts with many family female directors on boards are rare. Future research could instead use qualitative or case-based methods to study how family female directors contribute in settings where their numbers are low, or examine whether coalitions of family and non-family female directors can jointly create the equivalent of a 'critical mass', thereby uncovering mechanisms that may not require a strict numerical threshold. Such approaches would provide complementary insights into the influence of family female directors beyond what large-sample studies can capture.

Furthermore, our study's focus on a single cultural context—Italy—may limit the generalizability of its findings. The Italian context is characterized by a family-centric culture and deeply traditional gender roles, which together may constrain the contributions of family female directors. As a result, our findings may be less applicable to more egalitarian societies with weaker family influence and more dispersed ownership structures (e.g. Scandinavia, the Netherlands, or Canada), where women face less pressure to conform to family gendered identities and thus the differences between family and non-family female directors are likely to be less pronounced. By contrast, we expect such differences to be more salient in countries such as France, Germany and Spain, which similarly combine a family-centric culture, traditional gender norms and the strong presence of powerful family owners. We would also expect our findings to resonate in many emerging market contexts, where family institutions remain strong, ownership is highly concentrated, and traditional gender norms continue to influence women's opportunities in corporate leadership. Thus, while Italy offers a context where our theoretical mechanisms

are most pronounced, the extent to which our findings generalize across countries depends on how family and gender institutions intersect elsewhere.

However, although the strength of our findings may vary across contexts, underlying mechanisms are likely to remain relevant across countries. Family gendered roles, while more visible in some settings than others, persist even in the most egalitarian societies. For example, the practice of primogeniture succession in family firms has been documented in countries with some of the lowest gender gaps worldwide (Bennedsen et al., 2007; Remery et al., 2014). This suggests that family dynamics continue to shape female leaders' contributions, even under egalitarian institutional environments. Against this backdrop, we encourage future research to employ comparative cross-country designs to examine more systematically how national cultural and institutional environments shape the interplay between gender and family-induced diversity on corporate boards.

Finally, our study examined the period following the introduction of the Golfo-Mosca Law, which mandated that boards achieve at least 30 per cent representation of each gender. This overlap makes it challenging to disentangle the effects of the legislative changes from those of family gender dynamics. We encourage future studies to explore the reasons behind the appointment of women to boards, particularly by comparing the effects of female directors' family affiliations before and after the Golfo-Mosca regulation or by examining countries without similar legal mandates.

In conclusion, our exploration of the ways in which female directors' family affiliations shape the performance effects of board gender diversity is only an initial step towards understanding gender dynamics in the boardroom. While the increasing presence of women on corporate boards is commendable, our findings suggest that mere representation is not sufficient for value creation – particularly in family firms. Instead, the interplay between gender and family dynamics determines whether gender diversity leads to enhanced firm outcomes. Future research and policy should move beyond numeric targets and consider the contextual mechanisms that shape women's actual influence on boards.

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## NOTES

- [1] According to the Italian Corporate Governance Code (*Codice di Autodisciplina*), directors are qualified as independent when they are not connected with the controlling shareholders. Therefore, all independent female directors are not affiliated with the family.
- [2] The PSM procedure is conducted with the PSMATCH2 Stata module, written by Leuven and Sianesi (2003).

## REFERENCES

- Adams, R. B. and Ferreira, D. (2009). 'Women in the boardroom and their impact on governance and performance'. *Journal of Financial Economics*, **94**, 291–309.

- Adams, R. B., Hermalin, B. E. and Weisbach, M. S. (2010). 'The role of boards of directors in corporate governance: A conceptual framework and survey'. *Journal of Economic Literature*, **48**, 58–107.
- Aganin, A. and Volpin, P. (2005). 'The History of Corporate Ownership in Italy'. In Morck, R. (Ed), *A History of Corporate Governance Around the World: Family Business Groups to Professional Managers*. Chicago: University of Chicago Press, 325–66.
- Aguinis, H., Edwards, J. R. and Bradley, K. J. (2017). 'Improving our understanding of moderation and mediation in strategic management research'. *Organizational Research Methods*, **20**, 665–85.
- Ahern, K. R. and Dittmar, A. K. (2012). 'The changing of the boards: The impact on firm valuation of mandated female board representation'. *The Quarterly Journal of Economics*, **127**, 137–97.
- Alvesson, M. and Billing, Y. D. (2009). *Understanding Gender and Organizations*. London: Sage.
- Amore, M. D., Garofalo, O. and Minichilli, A. (2014). 'Gender interactions within the family firm'. *Management Science*, **60**, 1083–97.
- Amore, M. D., Minichilli, A. and Corbetta, G. (2011). 'How do managerial successions shape corporate financial policies in family firms?'. *Journal of Corporate Finance*, **17**, 1016–27.
- Anderson, R. C. and Reeb, D. M. (2003). 'Founding-family ownership and firm performance: Evidence from the S&P 500'. *The Journal of Finance*, **58**, 1301–28.
- Arrondo-García, R., Fernández-Méndez, C. and Menéndez-Requejo, S. (2016). 'The growth and performance of family businesses during the global financial crisis: The role of the generation in control'. *Journal of Family Business Strategy*, **7**, 227–37.
- Arun, T. G., Almahrog, Y. E. and Aribi, Z. A. (2015). 'Female directors and earnings management: Evidence from UK companies'. *International Review of Financial Analysis*, **39**, 137–46.
- Atif, M., Hossain, M., Alam, M. S. and Goergen, M. (2021). 'Does board gender diversity affect renewable energy consumption?'. *Journal of Corporate Finance*, **66**, 101665.
- Bauweraerts, J., Rondi, E., Rovelli, P., De Massis, A. and Sciascia, S. (2022). 'Are family female directors catalysts of innovation in family small and medium enterprises?'. *Strategic Entrepreneurship Journal*, **16**, 314–54.
- Bennedsen, M., Nielsen, K. M., Pérez-González, F. and Wolfenzon, D. (2007). 'Inside the family firm: The role of families in succession decisions and performance'. *The Quarterly Journal of Economics*, **122**, 647–91.
- Bennouri, M., Chtioui, T., Nagati, H. and Nekhili, M. (2018). 'Female board directorship and firm performance: What really matters?'. *Journal of Banking and Finance*, **88**, 267–91.
- Bettinelli, C. (2011). 'Boards of directors in family firms: An exploratory study of structure and group process'. *Family Business Review*, **24**, 151–69.
- Bettinelli, C., Del Bosco, B. and Giachino, C. (2019). 'Women on boards in family firms: What we know and what we need to know'. In Memili, E. and Dibrell, C. (Eds) (2019). *The Palgrave Handbook of Heterogeneity Among Family Firms*. Cham: Palgrave Macmillan, 201–28.
- Beuselincq, C. and Du, Y. (2017). 'Determinants of cash holdings in multinational corporation's foreign subsidiaries: US subsidiaries in China'. *Corporate Governance: An International Review*, **25**, 100–15.
- Bianco, M., Ciavarella, A. and Signoretti, R. (2015). 'Women on corporate boards in Italy: The role of family connections'. *Corporate Governance: An International Review*, **23**, 129–44.
- Billing, Y. D. (2011). 'Are women in management victims of the phantom of the male norm?'. *Gender, Work and Organization*, **18**, 298–317.
- Bruni, A., Gherardi, S. and Poggio, B. (2004). 'Doing gender, doing entrepreneurship: An ethnographic account of intertwined practices'. *Gender, Work and Organization*, **11**, 406–29.
- Bruno, G. S. F., Ciavarella, A. and Linciano, N. (2017). *Boardroom Gender Diversity and Performance of Listed Companies in Italy*. CONSOB Working Papers, 86
- Bryans, P. and Mavin, S. (2003). 'Women learning to become managers: Learning to fit in or to play a different game?'. *Management Learning*, **34**, 111–34.
- Busenbark, J. R., Graffin, S. D., Campbell, R. J. and Lee, E. Y. (2022). 'A marginal effects approach to interpreting main effects and moderation'. *Organizational Research Methods*, **25**, 147–69.
- Byrne, J., Fattoum, S. and Thébaud, S. (2019). 'A suitable boy? Gendered roles and hierarchies in family business succession'. *European Management Review*, **16**, 579–96.
- Byrne, J., Radu-Lefebvre, M., Fattoum, S. and Balachandra, L. (2021). 'Gender gymnastics in CEO succession: Masculinities, femininities and legitimacy'. *Organization Studies*, **42**, 129–59.
- Calabrò, A., Conti, E. and Masè, S. (2023). 'Trapped in a "golden cage"! The legitimization of women leadership in family business'. *Journal of Family Business Strategy*, **15**, 100569.
- Calabrò, A., Minichilli, A., Amore, M. D. and Brogi, M. (2018). 'The courage to choose! Primogeniture and leadership succession in family firms'. *Strategic Management Journal*, **39**, 2014–35.

- Calabrò, A., Torchia, M., Gomez-Mejia, L. R., Pongelli, C. and Lohe, F. W. (2025). 'What are family firms all about? Advancing family business research through socioemotional wealth theory'. *Journal of Management Studies*.
- Cambreá, D. R., Ponomareva, Y., Pittino, D. and Minichilli, A. (2022). 'Strings attached: Socioemotional wealth mixed gambles in the cash management choices of family firms'. *Journal of Family Business Strategy*, **13**, 100466.
- Campbell, K. and Mínguez-Vera, A. (2008). 'Gender diversity in the boardroom and firm financial performance'. *Journal of Business Ethics*, **83**, 435–51.
- Campopiano, G., De Massis, A., Rinaldi, F. R. and Sciascia, S. (2017). 'Women's involvement in family firms: Progress and challenges for future research'. *Journal of Family Business Strategy*, **8**, 200–12.
- Campopiano, G., Gabaldón, P. and Gimenez-Jimenez, D. (2023). 'Women directors and corporate social performance: An integrative review of the literature and a future research agenda'. *Journal of Business Ethics*, **182**, 717–46.
- Campopiano, G., Rinaldi, F. R., Sciascia, S. and De Massis, A. (2019). 'Family and non-family women on the board of directors: Effects on corporate citizenship behavior in family-controlled fashion firms'. *Journal of Cleaner Production*, **214**, 41–51.
- Carter, D. A., D'Souza, F., Simkins, B. J. and Simpson, W. G. (2010). 'The gender and ethnic diversity of US boards and board committees and firm financial performance'. *Corporate Governance: An International Review*, **18**, 396–414.
- Carter, D. A., Simkins, B. J. and Simpson, W. G. (2003). 'Corporate governance, board diversity, and firm value'. *Financial Review*, **38**, 33–53.
- Chen, J., Leung, W. S. and Goergen, M. (2017). 'The impact of board gender composition on dividend payouts'. *Journal of Corporate Finance*, **43**, 86–105.
- Chua, J. H., Chrisman, J. J., Steier, L. P. and Rau, S. B. (2012). 'Sources of heterogeneity in family firms: An introduction'. *Entrepreneurship Theory and Practice*, **36**, 1103–13.
- Constantinidis, C. and Nelson, T. (2009). 'Integrating succession and gender issues from the perspective of the daughter of family enterprise: A cross-national investigation'. *Management International*, **14**, 43–54.
- Conyon, M. J. and He, L. (2017). 'Firm performance and boardroom gender diversity: A quantile regression approach'. *Journal of Business Research*, **79**, 198–211.
- Cruz, C., Justo, R., Larrazza-Kintana, M. and Garcés-Galdeano, L. (2019). 'When do women make a better table? Examining the influence of women directors on family firm's corporate social performance'. *Entrepreneurship Theory and Practice*, **43**, 282–301.
- Curimbaba, F. (2002). 'The dynamics of women's roles as family business managers'. *Family Business Review*, **15**, 239–52.
- Custódio, C. and Siegel, S. (2020). 'Are chief executive officers more likely to be first-borns?' *PLoS One*, **15**, e0234987.
- Daspit, J. J., Chrisman, J. J., Sharma, P., Pearson, A. W. and Mahto, R. V. (2018). 'Governance as a source of family firm heterogeneity'. *Journal of Business Research*, **84**, 293–300.
- De Cabo, R. M., Gimeno, R. and Nieto, M. J. (2012). 'Gender diversity on European banks' boards of directors'. *Journal of Business Ethics*, **109**, 145–62.
- De Massis, A., Muñoz-Bullón, E., Sanchez-Bueno, M. J., Velasco, P. and Vismara, S. (2024). 'Executive gender and firm leverage decisions: The role of firm ownership and governance'. *Journal of Business Research*, **179**, 114700.
- Debellis, F., Torchia, M., Quarato, F. and Calabrò, A. (2022). 'Board openness and family firm internationalization: A social capital perspective'. *Small Business Economics*, **60**, 1431–48.
- Deng, X. (2015). 'Father-daughter succession in China: facilitators and challenges'. *Journal of Family Business Management*, **5**, 38–54.
- Deutsch, F. (2007). 'Undoing gender'. *Gender and Society*, **21**, 106–27.
- Dezső, C. L. and Ross, D. G. (2012). 'Does female representation in top management improve firm performance? A panel data investigation'. *Strategic Management Journal*, **33**, 1072–89.
- European Commission (2022). *Annual Report on Monitoring the Application of EU Law*. Technical Report. Brussels: European Commission.
- European Institute for Gender Equality (EIGE). (2022). *Gender Equality Index 2022*. Available at [www.eige.europa.eu](http://www.eige.europa.eu) (accessed 24 March 2023).
- Eyring, A. and Stead, B. A. (1998). 'Shattering the glass ceiling: Some successful corporate practices'. *Journal of Business Ethics*, **17**, 245–51.
- Ferrari, G., Ferraro, V., Profeta, P. and Pronzato, C. (2021). 'Do board gender quotas matter? Selection, performance, and stock market effects'. *Management Science*, **68**, 5618–43.

- Forbes, D. P. and Milliken, F. J. (1999). 'Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups'. *The Academy of Management Review*, **24**, 489–505.
- Frenkel, M. (2008). 'Gender identities in the Israeli hi-tech industry'. *Gender, Work and Organization*, **15**, 352–74.
- Gabaldon, P., de Anca, C., Mateos de Cabo, R. and Gimeno, R. (2016). 'Searching for women on boards: An analysis from the supply and demand perspective'. *Corporate Governance: An International Review*, **24**, 371–85.
- García-Meca, E. and Santana-Martín, D. J. (2023). 'Board gender diversity and performance in family firms: Exploring the faultline of family ties'. *Review of Managerial Science*, **17**, 1559–94.
- González, M., Guzmán, A., Pablo, E. and Trujillo, M. A. (2020). 'Does gender really matter in the boardroom? Evidence from closely held family firms'. *Review of Managerial Science*, **14**, 221–67.
- Green, C. P. and Homroy, S. (2018). 'Female directors, board committees and firm performance'. *European Economic Review*, **102**, 19–38.
- Gull, A. A., Nekhili, M., Nagati, H. and Chuioui, T. (2018). 'Beyond gender diversity: How specific attributes of female directors affect earnings management'. *The British Accounting Review*, **50**, 255–74.
- Haberman, H. and Danes, S. M. (2007). 'Father-daughter and father-son family business management transfer comparison: Family FIRO model application'. *Family Business Review*, **20**, 163–84.
- Hamilton, E. (2006). 'Whose story is it anyway? Narrative accounts of the role of women in founding and establishing family businesses'. *International Small Business Journal: Researching Entrepreneurship*, **24**, 253–71.
- Heinonen, J. and Hytti, U. (2011). *Gender in Family Firms: A Literature Review*. University of Turku, School of Economics. Available at: <http://pyk2.aalto.fi/ncsb2012/Heinonen.pdf>
- Herdhayinta, H., Lau, J. and Shen, C. H. (2021). 'Family female directors versus non-family female directors: Effects on firm value and dividend payouts in an extreme institutional environment'. *British Journal of Management*, **32**, 969–87.
- Hillman, A. J., Cannella, A. A., Jr. and Harris, I. C. (2002). 'Women and racial minorities in the boardroom: How do directors differ?'. *Journal of Management*, **28**, 747–63.
- Hogg, M. A. and Terry, D. J. (2000). 'Social identity and self-categorization processes in organizational contexts'. *Academy of Management Review*, **25**, 121–40.
- Hytti, U., Alsos, G. A., Heinonen, J. and Ljunggren, E. (2017). 'Navigating the family business: A gendered analysis of identity construction of daughters'. *International Small Business Journal: Researching Entrepreneurship*, **35**, 665–86.
- Issa, A., Zaid, M. A. and Hanaysha, J. R. (2022). 'Exploring the relationship between female director's profile and sustainability performance: Evidence from the Middle East'. *Managerial and Decision Economics*, **43**, 1980–2002.
- Jurkus, A. F., Park, J. C. and Woodard, L. S. (2011). 'Women in top management and agency costs'. *Journal of Business Research*, **64**, 180–6.
- Kelan, E. (2018). 'Men doing and undoing gender at work: A review and research agenda'. *International Journal of Management Reviews*, **20**, 544–58.
- Kirsch, A. (2018). 'The gender composition of corporate boards: A review and research agenda'. *The Leadership Quarterly*, **29**, 346–64.
- Kubiček, A. and Machek, O. (2019). 'Gender-related factors in family business succession: A systematic literature review'. *Review of Managerial Science*, **13**, 963–1002.
- Kutlu, G. and Ngoasong, M. Z. (2024). 'A framework for gender influences on sustainable business models in women's tourism entrepreneurship: doing and re-doing gender'. *Journal of Sustainable Tourism*, **32**(3), 500–18.
- Laique, U., Abdullah, F., Rehman, I. U. and Sergi, B. S. (2023). 'Two decades of research on board gender diversity and financial outcomes: Mapping heterogeneity and future research agenda'. *Corporate Social Responsibility and Environmental Management*, **30**, 2121–44.
- Lamkin Broome, L. and Krawiec, K. D. (2008). 'Signaling through board diversity: Is anyone listening'. *University of Cincinnati Law Review*, **77**, 431–64.
- Larkin, M. B., Bernardi, R. A. and Bosco, S. M. (2013). 'Does female representation on boards of directors associate with increased transparency and ethical behavior?'. *Accounting and the Public Interest*, **13**, 132–50.
- Lefley, F. and Janeček, V. (2024). 'Board gender diversity, quotas and critical mass theory'. *Corporate Communications: An International Journal*, **29**, 139–51.
- Leuven, E. and Sianesi, B. (2003). *PSMATCH2: Stata Module to Perform Full Mahalanobis and Propensity Score Matching, Common Support Graphing, and Covariate Imbalance Testing, Version 3.0. 0*. Available at <https://ideas.repec.org/c/boc/bocode/s432001.html>
- Levi, M., Li, K. and Zhang, F. (2014). 'Director gender and mergers and acquisitions'. *Journal of Corporate Finance*, **28**, 185–200.

- Liu, Y., Wei, Z. and Xie, F. (2014). 'Do women directors improve firm performance in China?'. *Journal of Corporate Finance*, **28**, 169–84.
- Martinez Jimenez, R. (2009). 'Research on women in family firms: Current status and future directions'. *Family Business Review*, **22**, 53–64.
- Maseda, A., Iturralde, T., Cooper, S. and Aparicio, G. (2022). 'Mapping women's involvement in family firms: A review based on bibliographic coupling analysis'. *International Journal of Management Reviews*, **24**, 279–305.
- Mavin, S. and Grandy, G. (2012). 'Doing gender well and differently in management'. *Gender in Management: An International Journal*, **27**, 218–31.
- Mavin, S., Grandy, G. and Williams, J. (2014). 'Experiences of women elite leaders doing gender: Intra-gender micro-violence between women'. *British Journal of Management*, **25**, 439–55.
- Messerschmidt, J. W. (2009). 'Doing gender' The impact and future of a salient sociological concept'. *Gender & Society*, **23**, 85–8.
- Miller, D., Le Breton-Miller, I., Lester, R. H. and Cannella, A. A., Jr. (2007). 'Are family firms really superior performers?'. *Journal of Corporate Finance*, **13**, 829–58.
- Miller, D., Le Breton-Miller, I., Minichilli, A., Corbetta, G. and Pittino, D. (2014). 'When do non-family CEO s outperform in family firms? Agency and behavioural agency perspectives'. *Journal of Management Studies*, **51**, 547–72.
- Minichilli, A., Brogi, M. and Calabrò, A. (2016). 'Weathering the storm: Family ownership, governance, and performance through the financial and economic crisis'. *Corporate Governance: An International Review*, **24**, 552–68.
- Mussolino, D., Cicellin, M., Pezzillo Iacono, M., Consiglio, S. and Martinez, M. (2019). 'Daughters' self-positioning in family business succession: A narrative inquiry'. *Journal of Family Business Strategy*, **10**, 72–86.
- Nekhili, M., Chakroun, H. and Chtioui, T. (2018). 'Women's leadership and firm performance: Family versus nonfamily firms'. *Journal of Business Ethics*, **153**, 291–316.
- Nekhili, M., Gull, A. A., Chtioui, T. and Radhouane, I. (2020). 'Gender-diverse boards and audit fees: What difference does gender quota legislation make?'. *Journal of Business Finance & Accounting*, **47**, 52–99.
- Nekhili, M., Nagati, H., Chtioui, T. and Nekhili, A. (2017). 'Gender-diverse board and the relevance of voluntary CSR reporting'. *International Review of Financial Analysis*, **50**, 81–100.
- Nelson, T. and 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**, 219–41.
- Nettowich, J. C. and Kelan, E. K. (2014). 'Towards a topology of 'doing gender': An analysis of empirical research and its challenges'. *Gender, Work and Organization*, **21**, 121–34.
- Nguyen, T. H. H., Ntim, C. G. and Malagila, J. K. (2020). 'Women on corporate boards and corporate financial and non-financial performance: A systematic literature review and future research agenda'. *International Review of Financial Analysis*, **71**, 101554.
- Nicholls Mutter, D. (2020). 'The morals of the women on boards story: Global board gender diversity efforts still need fairness-based arguments to move regulation to the next chapter'. *The International Lawyer*, **53**, 235–76.
- Nordqvist, M., Sharma, P. and Chirico, F. (2014). 'Family firm heterogeneity and governance: A configuration approach'. *Journal of Small Business Management*, **52**, 192–209.
- Overbeke, K. K., Bilimoria, D. and Perelli, S. (2013). 'The dearth of daughter successors in family businesses: Gendered norms, blindness to possibility, and invisibility'. *Journal of Family Business Strategy*, **4**, 201–12.
- Perryman, A. A., Fernando, G. D. and Tripathy, A. (2016). 'Do gender differences persist? An examination of gender diversity on firm performance, risk, and executive compensation'. *Journal of Business Research*, **69**, 579–86.
- Pini, B. (2005). 'The third sex: Women leaders in Australian agriculture'. *Gender, Work and Organization*, **12**, 73–88.
- Pletzer, J. L., Nikolova, R., Kedzior, K. K. and Voelpel, S. C. (2015). 'Does gender matter? Female representation on corporate boards and firm financial performance-a meta-analysis'. *PLoS One*, **10**, e0130005.
- Poletti-Hughes, J. and Martínez Garcia, B. (2020). 'Leverage in family firms: The moderating role of female directors and board quality'. *International Journal of Finance and Economics*, **27**, 207–23.
- Post, C. and Byron, K. (2015). 'Women on boards and firm financial performance: A meta-analysis'. *Academy of Management Journal*, **58**, 1546–71.
- Post, C., Gloor, J. L. and Byron, K. (2024). 'How men react to women's presence: A review and an agenda to expand team gender diversity research'. *Current Opinion in Psychology*, **60**, 101911.
- Prencipe, A., Bar-Yosef, S., Mazzola, P. and Pozza, L. (2011). 'Income smoothing in family-controlled companies: Evidence from Italy'. *Corporate Governance: An International Review*, **19**, 529–46.

- Remery, C., Matser, I. and Hans Flören, R. (2014). 'Successors in Dutch family businesses: Gender differences'. *Journal of Family Business Management*, **4**, 79–91.
- Richard, P. J., Devinney, T. M., Yip, G. S. and Johnson, G. (2009). 'Measuring organizational performance: Towards methodological best practice'. *Journal of Management*, **35**, 718–804.
- Richardson, G., Taylor, G. and Lanis, R. (2016). 'Women on the board of directors and corporate tax aggressiveness in Australia An empirical analysis'. *Accounting Research Journal*, **29**, 313–31.
- Rigolini, A. and Huse, M. (2021). 'Women and multiple board memberships: Social capital and institutional pressure'. *Journal of Business Ethics*, **169**, 443–59.
- Rosenbaum, P. R. and Rubin, D. B. (1983). 'The central role of the propensity score in observational studies for causal effects'. *Biometrika*, **70**, 41–55.
- Seierstad, C., Warner-Söderholm, G., Torchia, M. and Huse, M. (2017). 'Increasing the number of women on boards: The role of actors and processes'. *Journal of Business Ethics*, **141**, 289–315.
- Sheridan, A. and Milgate, D. (2005). 'Accessing board positions: a comparison of female and male board members' views'. *Corporate Governance*, **13**, 847–55.
- Singh, V., Point, S., Moulin, Y. and Davila, A. (2015). 'Legitimacy profiles of women directors on top French company boards'. *Journal of Management Development*, **34**, 803–20.
- Singh, V., Terjesen, S. and Vinnicombe, S. (2008). 'Newly appointed directors in the boardroom: How do women and men differ?'. *European Management Journal*, **26**, 48–58.
- Solal, I. and Snellman, K. (2019). 'Women don't mean business? Gender penalty in board composition'. *Organization Science*, **30**, 1270–88.
- Solimene, S., Coluccia, D. and Fontana, S. (2017). 'Gender diversity on corporate boards: An empirical investigation of Italian listed companies'. *Palgrave Communications*, **3**, 1–7.
- Spencer Stuart. (2023). *Board indexes*. Available at <https://www.spencerstuart.com/research-and-insight/board-indexes> (accessed 29 January 2024).
- Talmud, I. and Israeli, D. N. (1999). 'The relationship between gender and performance issues of concern to directors: Correlates or institution?' *Journal of Organizational Behavior*, **20**, 459–74.
- Tang, J. (2017). 'CEO duality and firm performance: The moderating roles of other executives and block-holding outside directors'. *European Management Journal*, **35**, 362–72.
- Terjesen, S., Sealy, R. and Singh, V. (2009). 'Women directors on corporate boards: A review and research agenda'. *Corporate Governance: An International Review*, **17**, 320–37.
- Ting, I. W. K., Wang, W. K., Lu, W. M. and Chen, Y. J. (2021). 'Do female directors will have impact on corporate performance?'. *Review of Managerial Science*, **15**, 611–31.
- Torchia, M., Calabrò, A. and Huse, M. (2011). 'Women directors on corporate boards: From tokenism to critical mass'. *Journal of Business Ethics*, **102**, 299–317.
- Wahid, A. S. (2019). 'The effects and the mechanisms of board gender diversity: Evidence from financial manipulation'. *Journal of Business Ethics*, **159**, 705–25.
- Wang, C. (2010). 'Daughter exclusion in family business succession: A review of the literature'. *Journal of Family and Economic Issues*, **31**, 475–84.
- Wang, Y., Ma, J. and Wang, T. (2021). 'Do all female directors have the same impact on corporate social responsibility? The role of their political connection'. *Asia Pacific Journal of Management*, **40**, 1047–74.
- Weck, M. K., Veltrop, D. B., Oehmichen, J. and Rink, F. (2022). 'Why and when female directors are less engaged in their board duties: An interface perspective'. *Long Range Planning*, **55**, 102123.
- West, C. and Zimmerman, D. H. (1987). 'Doing gender'. *Gender and Society*, **1**, 125–51.
- West, C. and Zimmerman, D. H. (2009). 'Accounting for doing gender'. *Gender & Society*, **23**, 112–22.
- Westphal, J. D. and Milton, L. P. (2000). 'How experience and network ties affect the influence of demographic minorities on corporate boards'. *Administrative Science Quarterly*, **45**, 366–98.
- Wooldridge, J. M. (2016). 'Basic regression analysis with time series data'. In *Introductory Econometrics a Modern Approach*. Cincinnati, OH: South-Western Cengage Learning, 311–43.
- Xing, L., Gonzalez, A. and Sila, V. (2021). 'Does cooperation among women enhance or impede firm performance?'. *The British Accounting Review*, **53**, 100936.
- Yousaf, M. and Dey, S. K. (2022). 'Best proxy to determine firm performance using financial ratios: A CHAID approach'. *Review of Economic Perspectives*, **22**, 219–39.
- Zalata, A. M., Núm, C. G., Choudhry, T., Hassancin, A. and Elzahar, H. (2019). 'Female directors and managerial opportunism: Monitoring versus advisory female directors'. *The Leadership Quarterly*, **30**, 101309.