Gender diversity and corporate financial distress in the Pakistan stock market: the interacting effect of family-controlled companies

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Abstract
Purpose – As the benefit of gender diversity continues to receive significant attention, a holistic investigation of its effect on corporate financial distress (CFD) is lacking. Therefore, this study examines the effects of board gender diversity, measured in different forms, such as the presence and proportion of female directors, family-affiliated female directors and the chief executive officer (CEO) gender, on CFD in Pakistan. The study also investigates the interacting effects of family-controlled (20 and 50% family-owned) companies on the association between board gender diversity and CFD.

Design/methodology/approach – The study applied the pooled cross-sectional logistic regression model to examine the effect of board gender diversity (presence and proportion of female directors, family-affiliated female directors and CEO gender) on CFD through a sample of 285 non-financial companies in Pakistan over the period of 2006–2017.

Findings – The results reveal that gender diversity on boards is significantly and negatively associated with CFD in Pakistan. In addition, when family ownership is 50% or more, the interacting effect of family control is found to be significant, while gender effects remain negative. The results suggest that female directors contribute to the long-term viability of companies, especially family-owned companies. Female directors are also found to be more prevalent in family-owned companies compared to their non-family counterparts.

Research limitations/implications – The findings imply that female directors may efficiently manage and control all functions necessary to guarantee the company’s long-term prosperity. Similarly, gender effects can outweigh the detrimental impact of family control when female directors are in reasonable numbers and of high quality in the boardroom.

Practical implications – The practical relevance of the findings is that female directors play a significant role on the corporate board. Thus, it is a wakeup call for Pakistani companies to recognize the critical role and uniqueness of women on the corporate ladder. Family companies can also galvanize on the uniqueness of women to improve their governance structure.

Originality/value – This study adds to the literature on the benefits of gender diversity in family and non-family-owned companies. Specifically, this study applied multiple measures of gender diversity and family control in a single study. In addition, the study was conducted in a country that is ranked as the second worst country in the Global Gender Gap Index 2022, implying that investigating this type of research would go a long way towards changing the minds of corporate executives and regulators about the critical role that women can play in the economy.

Keywords Pakistan, Female directors, Board gender diversity, Corporate financial distress, Family control

Paper type Research paper

1. Introduction
In corporate finance literature, one of the trending topics that is of particular interest to capital market regulators and stakeholders is corporate financial distress (CFD). A company is considered financially distressed when performance deteriorates to the extent that
financial obligations related to preferred stockholders and stakeholders (e.g. financial creditors, suppliers, employees and the society in general) become unachievable (Elloumi and Gueyie, 2001; Habib et al., 2020; Whitaker, 1999).

According to prior literature, governance characteristics, such as the structure and characteristics of the board of directors (BODs), contain some vital information that could explain CFD (Bravo-Urquiza and Moreno-Ureba, 2021; Chen et al., 2020; Elloumi and Gueyie, 2001; Lee and Yeh, 2004; Shahwan, 2015; Younas et al., 2021; Wang and Deng, 2006). Based on this insight, several studies have empirically documented that board size, board independence and ownership level of the BODs affect CFD across different contexts in countries, such as in Canada (Elloumi and Gueyie, 2001), in Taiwan (Cheng et al., 2009; Lee and Yeh, 2004), in Spain (Manzaneque et al., 2016), in China (Wang and Deng, 2006), in Malaysia (Ali and Nasir, 2018) and in Pakistan (Udin et al., 2017; Younas et al., 2021).

Empirical studies like Ali et al. (2022) and Yousaf et al. (2021) have reported that board diversity reduces financial distress likelihood, but their findings do not specifically reveal the impact of gender, in particular female directors. In addition, the country considered is China, which is a more advanced emerging market characterized by state-owned companies. Other studies that have focused on gender, such as Kristanti et al. (2016) and Mittal and Lavina (2018), have considered only family companies in Indonesia and India and have found that the percentage of female directors is negatively associated with the likelihood of financial distress, which means that the presence of female directors enhances board effectiveness towards reducing CFD.

Similar results were documented by Zhou (2019) for a sample of Chinese companies, which were attributed to the ability of female directors to exert strong internal governance that can reduce agency cost and restrict the behaviour of large shareholders tunnelling. A recent study by Guizani and Abdalkrim (2023) that used a sample of Malaysian companies has reported a significant negative association between the proportion of female directors and CFD, which means that they help to reduce the likelihood of CFD. However, Salloum and Azoury (2012) reported an insignificant association between female directors and financial distress in a sample of Middle Eastern countries.

An insight from these findings is that there is still inconclusive evidence on the effects of female directors on CFD. In addition, Jeong and Harrison (2017) mentioned that the effects of female directors on corporate outcomes may vary in other places and settings. As such, it is important to investigate whether or not female directors’ presence on the board reduces CFD in a natural setting, like Pakistan.

Investigating the effects of female directors is important because they have different steroid hormones that affect their risk-taking tendency compared to their male counterparts (Kim and Kamiya, 2015). In addition, theoretical insights from the agency and resource dependence theories suggest that female directors are considered instrumental in shaping companies competitive dynamics and strategic directions (Kolev et al., 2021), as well as enhancing board effectiveness through their monitory and advisory roles (Poletti-Hughes and Briano-Turrent, 2019; Terjesen et al., 2016; Zalata et al., 2019). Female directors also play vital roles in the development of a country’s governance and companies’ effectiveness (Halliday et al., 2021), and in a situation where they play an identical role in the labour market as men, $28 trillion, or 26% could be added to the global annual gross domestic product (GDP) by 2025 (Woetzel et al., 2015).

Considering the growing benefits of female directors on corporate boards and the economy at large, it is crucial to investigate the influence of female directors on CFD in the Pakistani market. This would enable a better understanding of the contribution of women to boardroom decisions that affect corporate growth and economic development.
The Pakistan market is considered a good setting to investigate the influence of female directors on CFD because of its unique institutional background. For instance, major corporate failures, such as the ENGRO Group of Companies, Taj Company Ltd., Sarah Textile and Mehran Bank Ltd., and rising corporate debt have attracted the attention of policymakers and academics on the effects of corporate governance practices on CFD in Pakistan (Udin et al., 2021). Similarly, events like liquidity and profitability that may make a company face the risk of financial distress are significant determinants of Pakistani companies’ investment decisions, and these investment decisions may be influenced by the gender composition of the BODs (Mirza et al., 2020). Therefore, gender effects may be exerted through liquidity and strategic channels.

Pakistan is a Muslim country influenced by traditional Islamic culture and social development, where males are dominant and females face many issues, such as gender discrimination in employment (15% labour force participation) and inequality in the provision of education (Bukhari and Ramzan, 2013; Farooq et al., 2019). According to the World Economic Forum’s Global Gender Gap Report in 2022, Pakistan is considered as the second worst country (145 out of 146 countries) on the Global Gender Gap Index. However, it is one of the Islamic countries that once had a female Prime Minister, Speaker of the National Assembly, High Court and Supreme Court Judges, as well as Major Generals in the Armed Forces (Tahir et al., 2021).

Pakistan is a country characterized by a weak governance structure and economic conditions (Usman et al., 2019). Therefore, the presence of female directors on the board may strengthen the governance structure of a company, thereby leading to improved performance. Although the Corporate Governance Code (CCG) of 2012 does not include any clause on gender diversity, the Pakistan Companies Act 2017 by the Securities Exchange Commission of Pakistan (SECP) requires listed companies to ensure at least one female is inducted on the corporate board (Khan et al., 2022; Tahir et al., 2021).

Given these aforementioned points, women who may find themselves on the corporate board or the upper echelons of Pakistani companies may have some unique or extraordinary characteristics (e.g. being highly qualified, having skills and experience required for corporate leadership that are different from the general population and having a family connection). The family connection may be important because the majority (59%) of Pakistan’s non-financial companies are family-owned (Khan et al., 2022; Udin et al., 2021), and these companies are indispensable to the economic growth of Pakistan (Yousaf et al., 2019). Thus, such women on the boards tend to perform extremely well or be game changers because they behave and act differently from their men to enhance the company’s value towards ensuring the long-term success of their company.

In addition, the corporate governance characteristics of family and non-family companies may differ because of the general notion that family companies place a higher value on company survival than on wealth maximization (Sah et al., 2022). This may have a significant impact on the influence of female directors on CFD. Hence, this study applied the agency and resource dependence theories to argue that there is a gender effect on CFD, and the theory of socio-emotional wealth (SEW) to find out if the impact may be influenced by family control in the Pakistan market. This will enable a better understanding of how female directors fare in family companies.

2. Literature review
2.1 Theoretical insight
According to the agency theory (Jensen and Meckling, 1976), agency problems brought on by the separation of owners and managers may result in companies being managed less efficiently, thereby increasing the likelihood of failure. The corporate board, however, is a key
governance mechanism that can help owners and managers align their goals, resolve conflicts with creditors and make it easier to access vital resources, besides providing management with guidance on various corporate decisions (Platt and Platt, 2012).

Since the BODs is an important element of the corporate governance structure and is responsible for major corporate decisions, its effectiveness is always questioned whenever a company is financially distressed (Bravo-Urquiza and Moreno-Ureba, 2021; Dowell et al., 2011; Liang et al., 2020). As such, an effective BODs may both prevent financial distress and aid in the growth of the company. This is achieved through decisions provided by the BODs, which include providing advice and expertise for problematic aspects of a specific interaction between managers and shareholders, participating in the strategic decision-making process (e.g. initiation and development), managing resources and monitoring performance (Baysinger and Butler, 1985; Fama and Jensen, 1983; Judge and Zeithaml, 1992).

It is not only the agency theory that provides insights into the key roles of BODs in a company; the resource dependence theory also claims that the BODs helps to solve the problems of external interdependence and uncertainty that arise from the exchange of resources with external organizations, which then can enhance the company’s financial stability (Pfeffer, 1972; Pfeffer and Salancik, 1978). Both theories offer insights into the importance of the BODs in a company towards the minimization of the risk of CFD and are instrumental to the operational and long-term sustainability of a company.

As claimed by policymakers and academic researchers, the allocation of a certain number of seats on the BODs to female members is one of the motivating factors for the proper functioning of the board. This is so because female directors significantly contribute to the board’s effectiveness and offer the boardroom more benefits than male directors. For instance, Rost and Osterloh (2010) discovered that female directors’ process information better than males under conditions of uncertainty.

Additionally, according to industry experts, female directors evaluate acquisitions from a broader perspective, and the market views these acquisitions as value-creating (Lucas et al., 2021). Investors have also emphasized the financial benefits of female directors, especially for companies with male CEO duality, no female members of the board on committees, and companies operating in industries with greater levels of competition, which require greater resources to enhance their value (Groening, 2018). These accruing benefits are derived from the unique set of skills, knowledge and experiences that female directors possess.

Similarly, Adams and Ferreira (2009) observed that female directors’ knowledge and perspectives help to improve the monitoring function of the board by reducing agency conflict, which could ultimately have an impact on the performance and financial distress of a company. An increase in the number of female directors can also help to improve managerial accountability in terms of board meeting attendance and CEO function, board independence and efficiency, which may in turn enhance the quality of the board’s decision-making process (Nielsen and Huse, 2010; Terjesen et al., 2016) and influence their ability to identify potential problems or threats facing the company (Kolev et al., 2021; Poletti-Hughes and Briano-Turrent, 2019).

The resource dependence theory also highlights the unique traits of female directors, such as their ability to increase companies’ access to capital through their social ties (Burke, 1997; McGuinness, 2018), increase board awareness of potential competitive actions (Kolev et al., 2021), foster innovation and creativity (Nekhili and Gatfaoui, 2013) and promote ethical behaviour in companies, such as limiting the behaviour of large shareholders tunnelling (Zhou, 2019) and being financially more responsible than their male counterparts (Poletti-Hughes and Briano-Turrent, 2019; Prügl, 2012; Sun et al., 2021).

On this note, this study makes the case that having female directors on board is morally, ethically and economically strategic for companies because they can tap into the diverse talents and opportunities that the female directors can bring to the table, which in turn, can
improve the company’s long-term prospects and financial stability. Consequently, the combined effects of the agency and resource dependence theories (which assume that female directors are drivers of good corporate governance in terms of mitigating agency problems, providing heterogeneity on the BODs, having greater independence and control, knowledge, value and strategic advice that can favourably enhance a company’s performance) can reduce the likelihood of a company becoming financially distressed.

2.2 Hypothesis development

2.2.1 Female directors and corporate financial distress. A number of studies exist on the impact of female directors on several corporate outcomes, such as dividend payments (Ye et al., 2019), investment efficiency (Farooq et al., 2022a, b; Saleh and Sun, 2021; Shin et al., 2020), litigation risk, failure risk and operational risk (Teodósio et al., 2021) and company performance and value (Aggarwal et al., 2019; Amin et al., 2022; Belaounia et al., 2020; Đặng et al., 2020; Küçük and Kuzey, 2016; Safiullah et al., 2022; Tahir et al., 2021; Terjesen et al., 2016), among others.

However, there is scant evidence on CFD with mixed results. For instance, Zhou’s (2019) results based on a sample of Chinese companies show that the presence of female directors on boards is negatively associated with financial distress, meaning that such companies tend to have strong financial ability. However, Salloum and Azoury (2012) could not find any significant association for a sample of companies from Middle Eastern countries, which the authors attributed to the low proportion of female directors.

In the case of Kristanti et al. (2016), a significantly negative association is found, but the authors focused only on Indonesian family companies. Similar results were documented by Mittal and Lavina (2018), who used a sample of Indian family companies. In another related study on female executives in the top management team, Cho et al. (2021) showed that a negative association exists between the ratio of female executives and the company’s bankruptcy risk, indicating that the higher the proportion of female executives, the lower the bankruptcy risk.

However, in the case of Bangladeshi companies, Saima and Arefin (2022) found no significant influence of female directors on CFD, which the authors mentioned could be a result of the selection of female directors based on family connection or kinship or their minimal representation on the corporate board. In addition, a higher presence of female directors is found on boards of financially distressed companies than non-financially distressed companies.

Based on this review, it is evident that the association between female directors and CFD remains unclear. Therefore, this study extends further by examining the impact of female directors on CFD in Pakistan, which is a different context from prior studies.

This study leverages the multi-theoretical arguments from the agency and resource dependence theories to show that female directors have unique sets of skills and experiences that are needed in the boardroom to influence corporate financial decisions, risk management and company performance. This is because female directors can improve corporate governance and influence strategic corporate decision-making, which in turn, can positively create value for shareholders (Dettori and Floris, 2022). Therefore, having female directors in the boardroom may help the board engage in financing and investment decisions that would add value to the long-term success and sustainable performance, thereby reducing the risk of the company becoming financially distressed. Hence, the hypothesis suggests that:

H1. Female directors are negatively associated with CFD.

2.2.2 CEO gender and corporate financial distress. Generally, the CEO of a company is the principal corporate decision-maker who primarily engages in initiating, implementing and
managing strategic decisions. Thus, the cognitive frames of the CEO in terms of demographics may have a significant influence on the decision-making process and structure of the board (Graham et al., 2013). One of the reliable measures of cognitive frames according to the upper echelons theory developed by Hambrick and Mason (1984) that may influence the CEO’s capacity to deliver unique task inputs needed for high-quality strategic decisions on the board, is often considered to be gender (Frye and Pham, 2018).

The gender of the CEO has a significant impact on the long-term value creation of the company because behavioural differences exist between males and females (Kanuri and Malm, 2018). For instance, studies have shown that female leaders possess more effective leadership styles and have better management skills (Conyon et al., 2015). A female CEO is assumed to be risk-averse but ethically cautious (Farooq et al., 2022a, b) and cognizant of the company’s surrounding industry and characteristics of the external environment (Jeong and Harrison, 2017; Kolev et al., 2021).

These behavioural differences and unique caches of knowledge possessed by female CEOs may influence companies’ strategic decisions to be less risky and allow performance advantages that would drive shareholder’s interest. Therefore, female CEOs may tend to increase the financial stability of a company, thereby reducing the likelihood of a company becoming financially distressed (Tahir et al., 2021). As such, this study posits that CEO gender may be negatively associated with the risk of a company experiencing financial distress. The next hypothesis posits that:

H2. CEO gender is negatively associated with CFD.

2.2.3 The interacting effects of family control on female directors and corporate financial distress. Family and non-family companies are distinct entities, offering different climates for the BODs and CEOs to operate in. In a family company, family or family members control and manage the daily operations of the company and invest their wealth in a single company (Gómez-Mejía et al., 2007). As such, they are considered critical drivers of their companies’ behaviour and performance (Villalonga and Amit, 2020).

According to the SEW theory, family companies are more concerned with long-term family-oriented goals, such as efficiency, higher social capital and survivability capital than economic goals (Aldamen et al., 2020; Zellweger et al., 2010). As such, the survivability of family-owned companies may be important because their failure may affect the welfare of the family and people in society as well as end the desire of the company to build a lasting legacy for future generations (González et al., 2012).

Based on this notion, family companies may be risk-willing and risk-averse at the same time, conservative in making strategic decisions and ensuring that resources available are used judiciously (Gomez-Meija et al., 2007; Mukarram et al., 2018). In addition, such companies may have a different governance structure that would ensure the long-term success because their motives are mostly non-economic.

However, this is not to say that family companies do not care about their economic wealth because studies have shown that family companies exhibit superior accounting and market performance relative to their counterparts, and this has been attributed to the controlling family’s unique governance attributes, long-term orientation and ownership (González et al., 2012; Villalonga and Amit, 2020).

Evidence has also shown that family companies will object to decisions that enhance financial performance in situations where such decisions negatively affect the SEW of the family (Gómez-Mejía et al., 2007; Leitterstorf and Rau, 2014). Moreover, this depends on whether or not the company has a family-dominated board (Gottardo and Moisello, 2015). For instance, Lohe and Calabro (2017) reported that during internal financial crises or distress, families seek to preserve control and reputation and hence, SEW, at the expense of financial performance. Likewise, Poletti-Hughes and Martinez Garcia (2022) revealed that family
companies prefer to use debt financing up to the point where the threat of losing control is decreased.

All these may suggest that female directors with family ties may align their objectives with those of the family, specifically with regards to the maximization of family wealth and survival of the company (Hisar and Hisar, 2018; Schulze et al., 2003). For instance, Wang and Li (2022) documented that female-embodied attributes, family cohesion, governance and female-characterized resource orchestration lead to the development of resilience in family companies.

The role of family-affiliated female directors is to represent the controlling family in the monitoring of managerial efforts, indicating that strong family connections differentiate the behaviours of women directors in family companies from their non-family counterparts (Ruigrok et al., 2007). In fact, Nekhili and Gatfaoui (2013) report that family ownership is positively associated with board gender diversity. Hence, this study argues that the presence of family-affiliated female directors may reduce the risk of a company becoming financially distressed.

**H3.** Family-affiliated female directors are negatively associated with CFD.

In contrast to the SEW theory, the agency theory suggests a conflict of interests may arise between majority and minority shareholders of the family-controlled companies, and this may lead to poor performance, especially if the majority shareholders expropriate resources at the expense of the company (Jensen and Meckling, 1976; Morck and Yeung, 2003). A similar argument was put forward by Yasser et al. (2017), where the authors claimed that when family representatives hold positions in the company’s board and management, it may lead to poor monitoring and control, and consequently, increase the likelihood of the risk of financial distress. For instance, Lins et al. (2013) documented that family consumption of private benefits can negatively affect the performance of the company.

Amin et al. (2022) also reported that the relationship between female directors and Pakistani companies’ performance become negative when family ownership moderates the relationship. Krishnan and Peytcheva (2019) also found that the risk of fraud in family companies is higher compared to non-family companies, which means families may behave opportunistically to extract rents and potentially expropriate companies’ resources at the expense of minority shareholders.

However, it is commonly acknowledged in governance literature that females play a vital role in addressing some of the problems faced in family companies. For instance, female representation on the board can help to increase board effectiveness by mitigating the propensity to consume private benefits through tougher monitoring and quality decision-making. Thus, family companies may employ female directors as a mechanism to enhance corporate governance without undermining the economic and family-oriented goals (Lohe and Calabrò, 2017).

In fact, extant literature has shown that companies with female directors perform significantly better, especially when female directors do not belong to the controlling family (Adams and Ferreira, 2009; Poletti-Hughes and Briano-Turrent, 2019). Therefore, the positive impact of female directors in governance may complement family ownership, improve financial decision-making and enhance the influence of female directors on the company. Hence, this study relies on the SEW theory to predict the relationship between female directors and financial distress, depending on whether a company is family-owned or non-family-owned. This is because family companies with female directors are less likely to engage in value-destroying consumption of private benefits that would destroy the prosperity of the company. On this basis, the next hypothesis is as follows:

**H4.** Family control moderates the relationship between female directors and CFD.
Other governance and company specific factors that may affect CFD include board size, directors’ independence, CEO duality, profitability, leverage, liquidity and company size. Board size is the number of directors on the board of a company and this plays a significant role in the functioning of the board. According to the agency theory, a small number of individuals on the board enable the BODs to effectively monitor the management, whereas having a large board may lead to ineffectiveness of the board because such boards may be confronted with the problem of coordination and communication and a low level of members’ commitment or participation in meetings, which consequently can delay the process of information needed for decision-making (Jensen, 1993; Lipton and Lorsch, 1992; Judge and Zeithaml, 1992).

All these may enable managers to pursue their personal goals rather than that of the company. The ability of managers to engage in such an act may negatively affect the performance of the company and the probability of financial distress. In fact, when a company falls into environmental turbulence, Goodstein et al. (1994) reported that a large board would have limited effectiveness in directing strategic change. Yermack (1996) also documented that companies with small boards exhibit more effective financial performance and CEOs in such companies have stronger incentives on compensation and the threat of dismissal. Younas et al. (2021) also found that board size is negatively associated with CFD for Pakistani non-financial companies, indicating that there is high likelihood of financial distress for companies with a large board. Similar findings were also documented by Wang and Deng (2006), but the results are insignificant.

Contrary to studies that have reported the ineffectiveness of large boards, other studies have relied on the proposition of the resource dependence theory that a company with a large board, tends to have the ability to control and better advice the management and to access requisite resources and information. Such boards with a broad range of interests and equipped with substantial knowledge and skills may create the diversity needed to improve access to information and resources by linking the board to the external environment, thereby reducing the risk of financial distress (Pearce and Zahra, 1992; Pfeffer, 1972). For instance, Manzaneque et al. (2016) evinced that Spanish companies with large board have less probability of becoming financially distressed. Similar results were documented by Ibrahim (2019) for non-financial companies listed on the Indonesia Stock Exchange (IDX) for the 2012–2016 period.

Another important variable is the independence of the BODs. Several studies have shown that the functions of the board can best be performed when directors are independent because they ensure transparency and minimize the opportunistic behaviour of management. For instance, independent directors create ties that assist companies in defeating the forces of market competition through explicit interim coordination of pricing strategies (Baysinger and Butler, 1985; Fama and Jensen, 1983).

The presence of independent directors on the board enables access to valuable resources and information and enhances board effectiveness through critical thinking and objectivity in decision-making (Judge and Zeithaml, 1992; Pfeffer, 1972). A number of studies have shown the importance of having more independent directors on the board by documenting a significant negative association between the proportion of independent directors and CFD (Elloumi and Gueyie, 2001; Manzaneque et al., 2016; Wang and Deng, 2006). This means that the greater the proportion of independent directors, the less the likelihood of companies encountering financial distress. Based on the importance of independent boards to monitor and control management, companies with high proportion of independent directors are less likely to go into financial distress.

Besides the number of independent directors on the board, another way to determine the independence of the board is when a company separates the role of the CEO and the Chairman (Manzaneque et al., 2016). The separation of the two roles help to decrease the risk
of entrenchment and agency cost through board monitoring, thereby enhancing the effectiveness and independence of the board in making decision (Jensen, 1993). Several studies, such as Younas et al. (2021), Manzaneque et al. (2016) and Wang and Deng (2006), have empirically shown that companies with the CEO also acting as the Chair of the BODs, are more likely to fail. This means that there is high risk of financial distress for companies with CEOs playing a dual leadership role. Therefore, a positive association is expected between CEO duality and CFD.

Several studies have shown that the financing decisions of a company can affect its credit risk and therefore impact the risk of CFD (Poletti-Hughes and Martinez Garcia, 2022). For instance, Pfeffer (1972) documented that companies with a relatively high proportion of debt in their capital structure may face greater financing problems. As such, the higher the financial leverage of a company, the lower the profitability, which could be due to implicit interest cost that would increase the risk of financial distress (Chen et al., 2020; Elloumi and Gueyie, 2001; Habib and Kayani, 2022; Ibrahim, 2019). Therefore, a positive association is likely between leverage and CFD.

Studies have also documented that large companies tend to have low risk of financial distress because such companies would have the capacity to exercise more control over their environment and remain competitive (Pfeffer, 1972) with high operational efficiency (Udin et al., 2017). Thus, the greater the assets of a company, the higher the capacity of the company to fulfil its future obligations. Habib and Kayani (2022) and Ibrahim (2019) empirically showed that the larger the companies, the less the likelihood of the occurrence of financial distress risk. Therefore, company size and growth may negatively affect the probability of a company becoming financially distressed.

Similarly, highly liquid and profitable companies tend to have low probability of financial distress because such companies would have enough resources to with their financial obligations (Elloumi and Gueyie, 2001; Habib and Kayani, 2022; Saima and Arefin, 2022; Shahwan, 2015; Younas et al., 2021). This suggests that profitability and liquidity are expected to be negatively associated with CFD.

3. Research design

3.1 Data and sample selection

The data used to investigate the effects of female directors on CFD in Pakistan consists of non-financial companies listed on the Pakistani Stock Exchange (PSE) over the period of 2006–2017. Non-financial companies are a crucial segment of a country’s economic well-being and have different reporting requirements compared to financial companies, which have different operating and controlling environments (Younas et al., 2021). The population of this study is 369 non-financial companies listed on the PSE as of 2017. Out of the 369, the non-availability of financial data for some companies (84) reduced the sample to 285 non-financial companies. Therefore, the final sample is 285. The data related to the corporate governance variables were obtained from the annual reports of companies downloaded from the PSE and opendoors.pk website. The data for the financial variables were extracted from the financial statement analysis of joint-stock companies published by the State Bank of Pakistan (SBP) and the annual reports.

Table 1 presents a summary of the variable measurements employed in this study. According to the Table, CFD, which is the dependent variable, was measured as a binary value of one (1) and zero (0). Similarly, female directors were captured using three different measurements, that is, a binary value, an index and ratio value. Other variables were determined by ratio.

However, since the dependent variable is a dichotomous variable, the appropriate econometric technique to apply in order to achieve the objective of the study is the pooled
cross-sectional logistic regression model. This approach is in line with prior studies that have examined the impact of corporate governance variables on CFD (Bravo-Urquiza and Moreno-Ureba, 2021; Elloumi and Gueyi, 2001; Habib and Kayani, 2022; Manzaneque et al., 2016). Therefore, models 1 and 2 capture the regression models used to carry out the study’s analysis. The first model is the baseline regression model without the interaction term of family control, while the second model reflects the interaction term.

Model 1

\[
FD_{it} = \beta_0 + \beta_1 AFEM_{it} + \beta_2 PFEM_{it} + \beta_3 BLAUNDEX_{it} + \beta_4 PFAMFEM_{it} + \beta_5 CEOD_{it}
\]

\[
+ \beta_6 CEOG_{it} + \beta_7 BZ_{it} + \beta_8 PINDP_{it} + \beta_9 FZ_{it} + \beta_{10} FG_{it} + \beta_{11} WCTA_{it}
\]

\[
+ \beta_{12} RETA_{it} + \beta_{13} EBITTA_{it} + \beta_{14} LEV_{it} + \epsilon_{it}.
\]
Model 2

\[ FD_{it} = \beta_0 + \beta_1 AFEM_{it} + \beta_2 FMAFEM_{it} + \beta_3 PFEM_{it} + \beta_4 FMPFEM_{it} + \beta_5 BLAUNINDEX_{it} + \beta_6 FMBLAUNINDEX_2_{it} + \beta_7 FMAFEM_2_{it} + \beta_8 FMPFEM_2_{it} + \beta_9 FMBLAUNINDEX_{it} + \beta_{10} CEOG_{it} + \beta_{11} FF20_{it} + \beta_{12} FF50_{it} + \beta_{13} BZ_{it} + \beta_{14} PINDP_{it} + \beta_{15} FZ_{it} + \beta_{16} FG_{it} + \beta_{17} LEV_{it} + \beta_{18} WCTA_{it} + \beta_{19} RETA_{it} + \beta_{20} EBITTA_{it} + \varepsilon_{it} . \]

4. Results
4.1 Descriptive statistics

The descriptive statistics of the variables used in this study are presented in Table 2. As indicated in the Table, the mean value for financial distress (FD) is 0.161, indicating that 16% of sampled companies are financially distressed. Similarly, the mean value for the presence of a female director on the board (AFEM) is 0.448, meaning that 44.80% of the sampled companies have the presence of a female director in the boardroom. This suggests that more than half of the sampled companies do not have a single female director on the board. The results are not surprising because the study was carried out before the revised CCG under the Companies Act 2017 where a mandatory provision for the appointment of at least one female director on the board was introduced for all public listed companies. The mean and

<table>
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<th>Variables</th>
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<th>Mean</th>
<th>Std. Dev</th>
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**Note(s):** FD represents financial distress; AFEM is the presence of a female on the board; PFEM is the proportion of females on the board; BLAUNINDEX is Blau index gender diversity; PFAMFEM is the proportion of family females; CEOG is the CEO gender; CEOD is the CEO duality; BZ is the board size; PINDP is the proportion of independent directors; FZ is the company size; FG is the company’s growth; LEV is the leverage; WCTA is the working capital to total assets; RETA is the retained earnings to total assets; EBITTA is the earnings before interest and tax to total assets; FF20 is the family company with 20% shares; FF50 is the family firm with 50% shares

**Source(s):** Authors own creation
maximum values of the proportion of female directors (PFEM) are 0.119 and 0.857, respectively, indicating that on average, 12% of female are on corporate boards of Pakistani companies and there is a company where almost (86%) all the directors are females. Among the female directors on the board, the mean and maximum values for family members are 0.113 and 0.571, respectively. This means an average of 11% and as high as 57% of female directors on the board have family connections, which may suggest that companies increase female representation by appointing family members. It may also suggest that family companies in Pakistan mainly provide opportunities for females to become directors. In fact, when family companies are categorized based on ownership of family members above 20%, it is found that 59.12% of Pakistani companies in the sample are family-owned companies, while when family ownership is based on 50% and above, 33.95% of the sampled companies are family-owned.

In the case of CEO gender (CEOg), the mean value is 0.016, indicating that only 2% of the sampled companies have a female as the CEO. This shows that the appointment of a female CEO is still a rare event in Pakistan. It is also interesting to know that 0.110 (11%) of the sampled companies have the same individual as the CEO and Chairperson (CEOd). This shows that the appointment of a female CEO is still a rare event in Pakistan. In terms of board size (BZ), which is the number of directors on the board, the mean and maximum values are 7.758 and 15, respectively. The mean and maximum values for the proportion of independent directors on the board are 0.132 (13.2%) and 0.857(85.7%), respectively.

In addition to the descriptive statistics of the sampled companies as a whole, this study proceeded further to test whether there are significant differences in the corporate governance and financial characteristics of distressed and non-distressed companies through the Mann Whitney test. According to the results of the test presented in Table 3, significant differences are found in PFEM, BLAUIINDEX, CEOd, BZ, PINDP, FZ, FG, LEV, WCTA, RETA and EBITTA. In the case of PFEM, it is found that the proportion of female directors is slightly higher in financially distressed companies than non-distressed companies. Similar results are also documented when the BLAUIINDEX was used as a measure of gender diversity. However,

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<th>Mann–Whitney U test</th>
<th>Significance differences</th>
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Note(s): AFEM is the presence of female on the board; PFEM is the proportion of females on the board; BLAUIINDEX is Blau index gender diversity; PFAMFEM is the proportion of family female; CEOd is the CEO gender; CEOG is the CEO duality; BZ is the board size; PINDP is the proportion of independent directors; FZ is the company size; LEV is leverage; WCTA is the working capital to total assets; RETA is the retained earnings to total assets; EBITTA is the earnings before interest and tax to total assets. In addition *** and ** Significant at 1 and 5 per cent levels, respectively

Source(s): Authors own creation

Table 3. Mean differences between healthy and distressed companies
in the context of CEOD, it is found that the percentage of companies that are financially distressed occurred more in companies with CEO duality. Financially distressed companies have smaller boards than non-financially distressed companies. However, the proportion of independent directors in financially distressed companies is more than non-financially distressed companies. Financially distressed companies are small in size, have less growth and are highly financially leveraged. Such companies have less liquidity and low performance.

4.2 Correlation results
Table 4 presents the correlation results for the variables used in the study. The correlation coefficient provides information on the tendency of fluctuation among variables. According to the correlation coefficients, PFEM and BLAUNDEX are found to be positively and significantly correlated with FD, which means that the various measurements of gender diversity on the board are positively associated with financially distressed companies. However, PFAMFEM and CEOG are negatively and significantly correlated with FD. This implies that when female directors on the board are family-affiliated and if the CEO is a female, there is an unlikely tendency that such companies would be financially distressed. In terms of the multicollinearity issue, the correlation coefficients of some variables such as WCTA to LEV and EBITTA to RETA display some evidences of multicollinearity because the coefficients are more than 0.70, which is the rule of thumb. Although, this may not be an issue since the study applied the logistic regression technique, however, to further test the multicollinearity problem, the study applied the variance inflation factor (VIF). The results of this test show that the highest value among the variable is 4.29. Therefore, multicollinearity is not an issue in this study.

4.3 Main regression results
In this section, the main regression results on the effects of the relationship between female representation on the board and CFD are reported in Table 5. The Table has seven columns. The first column captures the variables examined, while the remaining six columns present the regression results based on different measures of female representation on the board and the combination of other corporate governance and financial variables. For instance, in column 2, AFEM, which was measured as a value of 1 if a company has a female director on the board and 0 otherwise was regressed with other corporate governance and financial variables. Based on the regression results, AFEM is found to be negatively associated with FD at the 5% level of significance, which is consistent with H1. This means companies that have female representation on the board are less likely to face the risk of financial distress because female directors are known to have better monitoring skills that may lead to better performance.

However, PINDP and CEOD are found to be positively associated with FD at the 1% level of significance, indicating that Pakistani companies with a high proportion of independent directors, and companies where the CEO is the same person as the Chairman, tend to be confronted with the risk of experiencing financial distress. The findings also indicate that LEV and RETA are positively associated with FD at the 1 and 10% levels of significance, respectively, which show that financially leveraged companies tend to run into financial trouble as a result of implicit interest cost, thereby leading to greater risk of financial distress. Other financial variables like FZ, FG and WCTA, are all negatively associated with FD at the 1% level of significance, while EBITTA is at the 5% level. The findings imply that big, high growth, liquid and performance companies are not likely to become financially distressed. These companies have low risk of default due to the experience that they might have in terms of operational efficiency. This is consistent with Yousaf et al. (2021).
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**Note(s):** FD represents financial distress; PFEM is the proportion of females on the board; PFAMFEM is the proportion of family females on the board; CEOG is the CEO gender; CEOD is the CEO duality; BZ is the board size; PINDP is the proportion of independent directors; FZ is the company size; FG is the company growth; LEV is leverage; WCTA is the working capital to total assets; RETA is the retained earnings to total assets; EBITTA is the earnings before interest and tax to total assets; FF20 is the family company with 20% shares. In addition *, **, *** Significant at 10, 5 and 1 per cent levels, respectively

**Source(s):** Authors own creation
### Table 5. Logistic regression results

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<td>90.06%</td>
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<td>OBSERVATIONS</td>
<td>3,420</td>
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<td>3,420</td>
<td>3,420</td>
<td>3,420</td>
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<td>3,420</td>
</tr>
</tbody>
</table>

**Note(s):** AFEM is the presence of female on the board; PFEM is the proportion of females on the board; BLAINDEX is Blau index gender diversity; PFAMFEM is the proportion of family female; BZ is the board size; PINDP is the proportion of independent directors; CEOG is the CEO gender; CEOD is the CEO duality; FZ is the company size; FG is the company growth; LEV is leverage; WCTA is the working capital to total assets; RETA is the retained earnings to total assets; EBITTA is the earnings before interest and tax to total assets. AIC is Akaike information criteria, ACCURACY RATE is classification of accuracy of the model. In addition *, **, *** Significant at 10, 5 and 1 per cent levels, respectively.

**Source(s):** Authors own creation
In contrast to column 2, where AFEM is significant at the 1% level, in column 3, female representation, measured in terms of proportion, shows that PFEM is negatively associated with FD at the 10% level of significance, which supports H1. Other corporate governance variables such as PINDP and CEOD maintain the same level of significance, like in column 2. Likewise, all the financial variables display the same signs and levels of significance.

In column 4, female representation in the board was measured through the BLAUINDEX and the results show a negative association with FD at the 5% level of significance. Other variables’ significance levels and signs remain the same as in column 3. Based on the findings, it can be concluded that female representation on CFD is not affected by the different measurements of gender diversity on the corporate boards. Therefore, the relevance of female directors on corporate board cannot be under-rated.

Since companies with family-affiliated female directors have a higher proportion of women directors on their corporate boards in Pakistan, this study decided to create a new variable (PFAMFEM) to capture this into the earlier models used in columns 2 to 4. This led to new regression models presented in columns 5 to 7. Based on the inclusion of the new variable, the results show that PFAMFEM is insignificantly associated with CFD. However, AFEM and BLAUINDEX maintain their negative association with FD, but at different significance levels (5 and 10%). Despite the extent of significant differences, the results still indicate that female representation on the corporate board tends to improve the corporate governance level of Pakistani companies. Thus, it can be implied that that the presence of female directors on the board plays an important role in the management of the company and development of strategic decisions that positively affect Pakistani companies’ financial performance. Other corporate governance and financial variables remain significant as reported in columns 2 to 4.

In order to further identify whether or not family has an influence on the relationship between female representation on the board and CFD, this study created different measures of family representation in terms of ownership (20 and 50%), i.e. if the percentage of family ownership in a company is between 20 and 50% and above. The study started with 20% because it is the average value of family ownership in Pakistan (Younas et al., 2021). The ownership classifications (FF20 and FF50) were interacted with the different measurements of female representation on the board (AFEM, PFEM and BLAUINDEX). The interaction variables are FMAFEM, FMPFEM, FMBLAUINDEX and FMAFEM2, FMPFEM2, FMBLAUINDEX2. The results of the interaction terms are presented in columns 1 to 6 of Table 6.

According to the results, AFEM is found to be negatively associated with FD at the 10% level of significance, when FMAFEM2 was considered as the interacting variable. However, the interaction variable is found to be insignificantly associated with FD. When PFEM was considered as the measure of female representation and FMPFEM was considered as the interacting variable, PFEM is found to be positively associated with FD at the 1% level of significance, meaning that a higher proportion of female directors is found in financially distressed companies. However, FMPFEM is negatively associated with FD at the same level of significance. A significantly negative association is also found when FMPFEM2 was considered as the interacting variable. The implication of this is that the inclusion of more females in the boardroom is critically important and has real consequences in family-owned companies. This could be as a result of the ability of female directors to mitigate agency cost or corporate governance weakness that may arise from family ownership because female directors tend to bring new perspective into the boardroom and add value to the company. It is also an indication that female directors play a significant role in monitoring the company’s management and are more prudent in many investment and risky decisions, which ultimately mitigate the risk of financial distress of Pakistani companies.
### Table 6.
Logistic regression results for the interaction of family controlled companies

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<tr>
<td>AFEM</td>
<td>0.0726</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>FMAFEM</td>
<td>-0.365</td>
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<td></td>
<td></td>
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<tr>
<td>PFEM</td>
<td></td>
<td>2.530***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMPFEM</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>BLAUNDEX</td>
<td></td>
<td>-0.872</td>
<td></td>
<td></td>
<td></td>
<td>-1.264**</td>
</tr>
<tr>
<td>FMBLAUNDEX</td>
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<td></td>
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<td>FMAFEM2</td>
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<td></td>
<td>0.00454</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>FMPFEM2</td>
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<td></td>
<td></td>
<td></td>
<td>0.714</td>
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</tr>
<tr>
<td>FMBLAUNDEX2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.714</td>
</tr>
<tr>
<td>FF20</td>
<td>0.133</td>
<td>0.564***</td>
<td>0.247</td>
<td></td>
<td></td>
<td>0.714</td>
</tr>
<tr>
<td>FF50</td>
<td>0.0445</td>
<td>0.0791</td>
<td></td>
<td>-0.012</td>
<td>0.0314</td>
<td>0.0548</td>
</tr>
<tr>
<td>BZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PINDP</td>
<td>1.572***</td>
<td>1.770***</td>
<td>1.566***</td>
<td>1.534***</td>
<td>1.650***</td>
<td>1.506***</td>
</tr>
<tr>
<td>CEGO</td>
<td>-1.277</td>
<td>-1.519*</td>
<td>-1.304</td>
<td>-1.262</td>
<td>-1.394</td>
<td>-1.310</td>
</tr>
<tr>
<td>CED</td>
<td>0.861***</td>
<td>0.872***</td>
<td>0.875***</td>
<td>0.869***</td>
<td>0.882***</td>
<td>0.848***</td>
</tr>
<tr>
<td>FZ</td>
<td>-0.942***</td>
<td>-0.942***</td>
<td>-0.946***</td>
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<td>-0.971***</td>
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<td>-0.581***</td>
<td>-0.600***</td>
<td>-0.588***</td>
<td>-0.623***</td>
<td>-0.584***</td>
</tr>
<tr>
<td>LEV</td>
<td>1.514***</td>
<td>1.610***</td>
<td>1.526***</td>
<td>1.515***</td>
<td>1.537***</td>
<td>1.510***</td>
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<tr>
<td>WCTA</td>
<td>-1.974***</td>
<td>-1.896***</td>
<td>-1.976***</td>
<td>-1.987***</td>
<td>-1.961***</td>
<td>-1.971***</td>
</tr>
<tr>
<td>RETA</td>
<td>2.265*</td>
<td>2.158*</td>
<td>2.163*</td>
<td>2.258*</td>
<td>2.052*</td>
<td>2.221*</td>
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<tr>
<td>CONSTANT</td>
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<td>1.931***</td>
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<td>2.039***</td>
<td>2.681***</td>
<td>4.926***</td>
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<tr>
<td>AIC</td>
<td>1901.439</td>
<td>1873.815</td>
<td>1904.732</td>
<td>1902.691</td>
<td>1896.712</td>
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<tr>
<td>ACCURACY RATE</td>
<td>89.97%</td>
<td>90.15%</td>
<td>90.06%</td>
<td>90.06%</td>
<td>90.03%</td>
<td>90.12%</td>
</tr>
<tr>
<td>OBSERVATIONS</td>
<td>3,420</td>
<td>3,420</td>
<td>3,420</td>
<td>3,420</td>
<td>3,420</td>
<td>3,420</td>
</tr>
</tbody>
</table>

**Note(s):** AFEM is the presence of female on the board; FMAFEM is interaction between AFEM and family company with 20% shares; PFEM is the proportion of females on the board; FMPFEM is interaction between PFEM and family company with 20% shares; BLAUNDEX is Blau index gender diversity; FMBLAUNDEX is the interaction between FMAFEM and family company with 20% shares; FMAFEM2 is the interaction between AFEM and family company with 50% shares; PFEM is the proportion of females in the board; FMPFEM2 is interaction between PFEM and family company with 50% shares; BLAUNDEX is Blau index gender diversity; FMBLAUNDEX2 is interaction between FMBLAUNDEX and family company with 50% shares; PFAMFEM is the proportion of family female; CED is the CEO gender; CEDB is the CEO duality; BZ is the board size; PINDP is the proportion of independent directors; FZ is the company size; FG is the company growth; LEV is leverage; WCTA is the working capital to total assets; RETA is the retained earnings to total assets; EBITTA is the earnings before interest and tax to total assets; FF20 is family company with 20% shares; FF50 is family company with 50% shares. AIC is Akaike information criteria, ACCURACY RATE is the classification of accuracy of the model. In addition * *** Significant at 10, 5 and 1 per cent levels, respectively.

**Source(s):** Authors own creation
In addition, FF20 is found to be positively associated with FD at the 1% level of significance, meaning that family ownership has a significant impact on companies’ financial health. Such companies are likely to be financially unhealthy. Further results show that when female representation was measured according to BLAUIINDEX, a negative association is found, thereby maintaining the significant influence of female directors on the board. All these reveal the importance of female representation in corporate decision-making which is a precursor to financial success and averting the risks of financial distress of companies.

5. Discussion

There is a general argument among scholars that CFD is deeply rooted in weak corporate governance, which means that with good corporate governance in place, a company could minimize the risk of financial distress. However, a major way to enhance corporate governance and improve the prosperity of a company is through female representation on corporate boards because such female representation can increase diversity and improve decision-making effectiveness (Halliday et al., 2021; Lucas et al., 2021).

Based on the value-added advantage of female directors, this study investigated the effects of female directors on the likelihood of financial distress for Pakistani non-financial companies. The study used a sample of 285 Pakistani companies over the period of 2006–2017 and measured female directors through multiple measures, using binary values of 1 and 0, the proportion of female directors and the BLAUIINDEX. The data were analysed through the logistic regression technique, and the results indicate that female directors have a significantly negative influence on CFD in Pakistan, which means that gender diverse companies have a lower risk of experiencing financial distress. This is the result of the ability of the BODs to create value for various stakeholders of the company, scrutinize investment decisions and perform other functions of the board more effectively. Thus, the impact of female directors on the corporate boards of Pakistani companies cannot be taken with levity because they play an important role in improving the monitoring and independence levels of Pakistani corporate boards, which increases board performance. As such, the degree of financial health of Pakistani companies can be affected by the composition of the BODs.

The results buttress the point stressed by Adams and Ferreira (2009) that female directors enhance the effectiveness of the board in making decisions through enhanced monitoring and advisory functions that lead to long-term sustainability and reduced risks of companies becoming financially distressed. The results are also in line with the large stream of literature on the positive impact of female directors on company performance (Aggarwal et al., 2019; Amin et al., 2022) and the negative effects on financial distress (Cho et al., 2021; Zhou, 2019), among others. The results are also consistent with Tahir et al.’s (2021) study in Pakistan, which shows that female directors have a positive impact on the financial stability of Pakistani companies. However, the results are in contrast to Saima and Arfin (2022) findings of an insignificant influence of female directors on financial distress risk of Bangladeshi companies, but a higher presence of female directors is found in financially distressed companies than non-financial distressed ones.

Theoretical insight into the negative influence of female directors can be related to the agency theory assumptions that female directors are diligent (Carter et al., 2010), have better monitoring skills and are truly independent (Adams and Ferreira, 2009). Female directors are also known to influence competitive dynamics and shape the strategic direction of the companies they serve, which eventually can increase business excellence and performance, resulting in decreased financial distress (Kolev et al., 2021; Weck et al., 2022).

Similarly, economic and ethical arguments have pointed out that female directors have unique skills and characteristics that are difficult to imitate and professional experiences and perspectives that tend to improve board efficiency compared to males (Ward and Forker,
These unique sets of skills and characteristics, as documented by the resource
dependence theory, include their conservative nature, risk aversion and group thinking
reduction of women in comparison to men. All these tend to make the board members to be
better informed and engage in strategic actions that would lead to better investment
opportunities for their company (Miller and del Carmen Triana, 2009; Poletti-Hughes and
Briano-Turrent, 2019). The investment opportunities generate cash flows that add value and
improve the company's performance, thereby reducing the likelihood of the company
becoming financially distressed. Therefore, it can be concluded that female directors on
corporate boards contribute to effective managerial decision-making that cultivates a culture
of sustainability and superior performance in the long-run, thereby reducing the likelihood
of CFD.

Further results show that family ownership is positively and significantly associated with
CFD, indicating that family-owned companies are likely to experience financial distress.
However, the results for the interacting effects of family ownership with the proportion
of female directors on CFD are found to be negative, which may imply that a higher proportion
of female directors in family companies improves the corporate governance practices of such
companies, thereby affecting strategic, operational control and decision-making that would
guarantee the long-term survival of the company through improved financial performance
and investment efficiency. On this basis, investors may be more interested in businesses
based on family ownership because of the presence of female directors. For instance, Amin
et al. (2022) demonstrated that a higher proportion of female directors can facilitate
communication on the corporate board and reduce the adverse effect of family concentration,
thereby improving the performance of companies in Pakistan. Nielsen and Huse (2010)
mentioned that female directors influence the board's strategic involvement through their
contribution to fair decision-making (Bart and McQueen, 2013). As such, it can be assumed
that female directors can reduce agency problems through monitoring and supervision
because in family-owned companies, the agency problem may likely be between majority and
minority shareholders and decision-making from the board must take into consideration the
effect of any decision on the competing interests in the company. The results therefore
suggest that female directors offer unique skills, perspectives, experiences and management
styles that benefit family companies. The findings are consistent with Kristanti et al. (2016)
and Mittal and Lavina (2018), who reported that female directors reduce the risk of financial
distress in family-controlled companies in Indonesia and India. It is also in line with
Aldamen et al.’s (2020) argument that a higher level of governance during times of financial
distress can increase family companies' chances of survival. Although the direct association
between family-affiliated female directors and CFD is insignificant, this may suggest that
family-affiliated female directors' formal roles and participation in the decision-making
process may not be related.

Among the control variables, CEO duality is found to be positively associated with
financial distress, meaning that companies with a single individual as the CEO and Chairman
may increase the risk of entrenchment and the agency cost, which could lead to financial
distress (Fama and Jensen, 1983; Jensen, 1993). This is consistent with Younas et al. (2021) and
Ali and Nasir (2018). In addition, consistent with Elloumi and Gueyié (2001), a positive
association is found between leverage and CFD, which means that highly financially
leveraged companies are prone to experiencing financial distress. This is because financial
leverage reduces the earnings power of the company due to implicit interest costs and
enhances the risk of financial distress. However, company size, growth and financial
performance are negatively associated with CFD. This indicates that big, high-growth, liquid
and financially strong companies have a low risk of default due to their experience and
operational efficiency (Cho et al., 2021; Elloumi and Gueyié, 2001; Udin et al., 2017). Overall,
this study is able to establish the significance of having women on corporate boards.
6. Conclusion
In this study, the role of female directors in mitigating the risk of CFD was examined using a sample of 285 Pakistani companies. Female directors on the board were captured using three separate measures: a dummy value of 1 when a company had a female on its board, and 0 otherwise; the proportion of female directors on the board and the BLAUIDX. Female directors are found to have significant negative association with financial distress based on the three criteria. Furthermore, the relationship between female directors and CFD is moderated by family ownership, implying that female directors and family control act as substitutes in the governance system of companies.

These findings show that companies with good corporate governance via female representation have a lower probability of being financially distressed in Pakistan. The study adds to general literature on the effects of gender diversity on CFD, particularly, in a country like Pakistan, where social attitude towards gender equality are less progressive and discussion on gender diversity on boards is evolving. Thus, it can be assumed that diverse workforce is good for companies and stakeholders because females are associated with prudent and sustainable decision-making.

With the evidence reported in this study, Pakistani companies may be encouraged to consider appointing a female board member in order to promote good corporate governance practices. This is because the appointment of female directors could be used to maintain investors’ trust, enhance monitoring and increase transparency. As such, relevant regulatory agencies should emphasize on the importance of female representation on corporate boards in a country like Pakistan, where females have few opportunities.

Increased efforts on such practices could improve companies’ prospects and increase their chances of attracting investment from domestic and foreign investors, as well as encourage the efficient use of resources. It is also worthwhile to note that the ownership structure of companies should be taken into account during the formulation of governance and economic policies because the growth and prosperity of family companies can have a significant impact on a country’s GDP growth and employment.

Furthermore, this study suggests that regulators in Pakistan should not mandate, but rather suggest and point out the importance of companies having female representation on their board in order to encourage companies to appoint high-quality women. It would also motivate companies to appoint women to corporate board not simply to fulfil all righteousness, but also to galvanize their potential.

The practical implication of the findings is that female directors are enormously beneficial to all companies (family and non-family) and may be necessary in most companies where ownership is concentrated, as in the case of family-controlled companies. This also highlights how effective corporate governance can strengthen the board’s monitoring and advisory roles, particularly, in an uncertain business climate with weak minority shareholders’ protection, such as in Pakistan.

With the benefits that companies can receive from having female directors, Pakistani women may be able to overcome the glass ceiling barriers they encounter towards attaining top management positions by being recognized for their importance. Overall, the outcomes of this study help to fill the knowledge gap about the advantage of having women on the corporate board.

Future studies can benefit from the study’s shortcomings, which include inability to access specific information (e.g. age, education, experience and nationality of female directors). Additionally, the critical mass theory can be applied to explain the effects of female directors on CFD. It is also unclear whether it is the educational qualifications of these female directors, company ownership, or the act of companies attempting to achieve greater independence of the board, that have offered females the possibility of serving on corporate boards. By investigating this topic, it can be revealed whether or not the professional expertise and competencies of female directors is important. Other measurements of financial distress can be considered as well.
References


Further reading


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