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Moderating Role of Internal Control between the Gender Diversity and Board of Director for Financial Performance of State-owned Enterprises in China

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Abstract
The issue of women goes out of their families to work in enterprises and gradually become senior managers is becoming more and more common. In this context, first, this study focuses on studying the role of the gender diversity and board of director for corporate financial performance. Second, this study considers the importance of internal control for corporate financial performance as a moderating factor between gender diversity and corporate financial performance. Third, this study highlights the significance of internal control for improving corporate financial performance. Lastly, this study uses the role of internal control as a moderating factor in the association between board of director and corporate financial performance. This study uses panel data of 814 A-share listed companies (8140 observations) in China from 2012 to 2021 and employs different dynamic panel regression models and robustness test. This study concludes following: first, the gender diversity has significance for improving the corporate financial performance. Second, board of director helps to improve the corporate financial performance. Third, internal control helps to enhance the corporate financial performance. Fourth, internal control positively affects between gender diversity and corporate financial performance. Fifth, internal control is beneficial to the board of director and corporate financial performance. This study looking at the female director from the different perspective by relating it to the special situation in China in the corporate governance study. This study contributes to look at indirect effect of internal control in the relationship.

Introduction
With the development of economy and the continuous progress of society, more and more

women go out of their families to enter the workplace, and undertake more and more important jobs in the workplace, becoming corporate executives and even serving as general manager and chairman of the board (Brinton, 1993). The Board serves as the core of corporate governance heart, the effective play of its governance and supervision function is the guarantee to realize corporate governance and improve the financial performance of enterprises (Omran, 2009). Recent years, China has established a suitable state-owned enterprise by introducing and drawing on the management concepts of western developed countries, the corporate governance structure is also gradually improving (See et al., 2020).

This research is relevant in the public companies because corporate performance is particularly important in public companies. Because the prior studies revealed that different gender board compositions will necessarily differ in the formulation and implementation of corporate decisions (Carmo et al., 2022). Corporate decision-making has a significant impact on the corporate governance structure. In the context of increasingly fierce global competition, higher requirements are raised for the effectiveness of corporate governance. How to occupy the market share in the changing market environment and improve the financial performance is the core problem of enterprise thinking (Kurniati, 2019).

In this scenario, board of directors play an important role in encourage financial performance. In the interim measures for the management of the responsibilities of chief accountants of central enterprises, performance is defined as a comprehensive analysis index (Yang & Luo, 2020). Furthermore, female executives play a pivotal role in the executive team and in improving corporate performance (Wen, 2019). In this regard, the structure and composition of the board of directors may be important in assuring the quality of social activities (Eberhardt-Toth, 2017). Moreover, female executives have a positive impact on corporate performance, that is, owning women Sexual executives have better financial performance (Nguyen et al., 2021). Gender equality is crucial for attaining social development, enhancing economic growth, and promoting business performance, according to the 2030 Agenda. Furthermore, females are more ethical than male directors (Smith et al., 2001).

The board of directors has always been in the core and hub position in corporate governance, so the different characteristics of the board of directors directly determine the efficiency of corporate governance, which has an important impact on corporate performance (Almashhadani, 2022). The board of directors can be enhanced to improve decision-making efficiency, and effective corporate strategies can be implemented to maximize shareholder wealth (Gompers et al., 2003). In this context, many researchers have previously stated that strong top governance and board members are helpful for sustainable (Nguyen et al., 2021; Jacoby et al., 2019; Maung et al., 2016). In addition, the company's operating performance is closely related to the interests of the directors, and the board of directors is used to more actively supervise and manage the managers, to improve their own interests (De Andres & Vallelado, 2008).

The board of directors is frequently involved in affecting decision-making; (Parisi et al., 2009). Ensuring management team control, and oversight (Gillan, 2006); and the behavior and composition of the board of directors will have an important impact on the business development of the company (Wang, 2019). As a result, for the advancement of board of directors as corporate financial performance, this study discusses the board of directors. Although the board diversity impacts on corporate financial performance, the next question is raised if the board diversity can influence the corporate financial performance, then what are the important reason that contribute to this relationship? Therefore, for the enhancement of the board of directors and corporate financial performance, this study recommends the notion of internal control.

Because internal control has a substantial influence on enterprise value (Pasko et al., 2021). According to this study, internal control has a major effect on corporate financial performance. Besides, internal control is valuable tools for the gender diversity and the board of directors. Thus, the present responses to the questions have clear gaps. Consequently, this study advises that the concepts of internal control can be used to influence the gender diversity and the board of directors. To the best of our knowledge, no previous study has examined the moderating role of internal control specifically in the context of a relationship between the gender diversity and corporate financial performance, as well as between the board of directors and corporate financial performance.

To examine the above-mentioned issues, this study uses various theories for proper theoretical support. This study uses the resource dependence theory, which sheds light on organizations must try to reduce their dependence on external resources, to gain access to stabilize critical resources from the external environment, or to obtain ways to exchange their resources. Secondly, human capital theory is widely accepted theoretical position that priorities human. A crucial discovery of institutional theory, according to researchers expanding on this perspective, is ethics: management is based on people, serving people, in order to achieve the all-round development of people. Lastly, the agency theory highlighted that a diverse board is more likely to be a stronger monitor of managers' performance since diversity improves funding decisions (Jensen and Meckling, 1976). According to Harjoto and Rossi (2019), female directors encourage corporations to use corporate social strategies to address agency problems.

After the empirical and theoretical evaluation, this study contributes to the current literature in the subsequent means: First, it investigates the role of the gender diversity for corporate financial performance. Our findings revealed that the gender diversity had a favorable impact on corporate financial performance. Second, this study contributes to the literature by emphasizing the importance of the board of director for corporate financial performance. Third, this study reveals that the gender diversity and the board director improve internal control, and internal control has a positive moderating influence on the link between the gender diversity and corporate financial performance, as well as between the board directors and corporate financial performance. Fourth, this research finds that internal control has a direct effect on corporate financial performance.

Furthermore, our research provides documentation for company policymakers seeking to improve the company's performance. Similarly, regulatory agencies can concentrate on these findings to eliminate harmful outcomes. Corporate financial performance and the board of directors can be beneficial for developing and developed countries' firms for helping to reduce industrial negative effects. Additionally, this study is also helpful for policymakers to achieving firm long-run social and environmental goals.

The rest of the paper is distributed into different sections. Section 2 explains the theoretical analysis and empirical discussion to develop hypotheses. The section 3 discusses data collecting, variable measurement, and research methods. Section 4 provides the outcome of this paper. Section 5 summarizes outcomes, consequences, limits, and future directions.

Literature Review and Hypothesis Development

The Gender Diversity and Corporate Financial Performance: Resource Dependence and Human Capital Theory

In empirical studies explaining gender differences in entrepreneurial performance, some scholars suggest that the possible reason is that female entrepreneurs have fewer levels of financing (Saleh et al., 2021). This study emphasizes the gender diversity for corporate financial performance and additionally the role of internal control on corporate financial performance individually and as a moderating on the link between the gender diversity and the corporate financial performance.

Some scholars have found that female executives have a positive impact on corporate performance, that is, owning women Sexual executives have better financial performance (Bullough et al., 2019). The gender diversity can also be beneficial for the improvement of firm performance. In this context, Wang (2019) state that the executive team is gender diversified, and different gender individuals vary greatly on the cognitive basis belief and attitude will bring a broader vision to the board. There are more decision-making methods for difficulties and tasks, thus improving decision-making ability and enterprise governance ability, to achieve the purpose of promoting performance (Uadiale, 2010). In addition, this study uses a variety of theories for properly supporting the role of the gender diversity for corporate financial performance.

For example, firstly, this study uses the resource dependence theory, which sheds light on organizations must try to reduce their dependence on external resources, to gain access to stabilize critical resources from the external environment, or to obtain ways to exchange their resources. Hillman et al (2000) use the resource-dependence theory to show that the more diversified the board level is, the more resources they can provide to enterprises, and the more advantages they will bring (Bin et al., 2020). Furthermore, gender diversity of the senior management team promotes the comprehensive ability of the board of directors to provide resources to enterprises. Gender diversity is conducive to the integration of the advantages of senior executives from different backgrounds, and thus conducive to improving the level of corporate governance (Perryman et al., 2016). According to this view, the gender diversity plays a significant role in corporate financial performance.

Secondly, human capital theory adoption, in which gender differences lead to women to have more careful thinking and thinking ability than men, and more mature and calmer mind, making women more accurate and realistic when making major decisions than men and can calmly put forward more reasonable plans, and increase the creativity of enterprises. This theory also expounds that core human capital helps to establish the core competitiveness, improve corporate governance performance, and improve the utilization rate of enterprise resources (Liu & Li, 2023). In addition to this, female directors' participation can also improve the quality of board discussions on complex issues and reduce the likelihood of major decision errors, such as investment decisions (Harjoto & Rossi, 2019). According to this view, Female executives play a pivotal role in the executive team and in improving corporate performance (Liu & Li, 2023).

Thus, these theories protect the right of all stakeholders and provide a competitive advantage. We use these resource dependence and human capital theory because of many reasons for supporting the role of the gender diversity and corporate financial performance. Higher corporate performance enables a good institutional reputation, and gender diversity in corporate teams can make it possible. Because the use of external resources by a company and environmental factors must be connected in some way. Thus, this theory encourages the gender diversity for improving corporate financial performance.

Furthermore, Smith et al.(2006) select a total of 215 American fortune 500 companies from 1980 to 1998 for research, finding that companies with a higher percentage of women on the board performed higher than the average company. In addition, Lu & Cao (2018) studied the relevance of female directors to company value. From 2007 to 2010, her dataset contains observations of changing value of 1,291 listed companies. Her research showed that female directors had a positive effect on company value after controlling for other variables, and that this positive effect became more pronounced as the proportion of female directors increased.

In addition, Yang et al (2020) explored the ideas of female entrepreneurial leaders in the context of change in China. OLS regression and HLM analysis were used in this study to evaluate the research hypothesis using data from 152 women-run enterprises. According to the study results, female leaders have a significant and positive impact on the performance of entrepreneurial organizations. Feng et al (2018) used negative binomial regression analysis to empirically analyze whether female participation in the executive team affected corporate performance. He has found that female participation in executive teams has significantly improved corporate innovation performance.

Through the resource dependency and human capital theories, the goal of this study is to investigate the influence of the impact of female proportions on financial performance. To evaluate the data, the researchers used multilevel modeling using the GMM estimation methodology. The outcome implies that the gender diversity and female proportion has a significant effect on corporate financial performance. Moreover, another study aims to add to the existing business strategy and environmental literature by examining the impact of governance structures on Chinese firms' environmental performance and, as a result, determining the extent to which governance mechanisms moderate the financial performance-environmental performance nexus (Nguyen et al., 2021). Their findings show that within a certain range, the higher the proportion of women in the team, the better the company performance.

Similarly, another study investigated the relationship between the female executives and corporate performance. The results show a significant association between the social capital of female executives and corporate performance(Hussain et al., 2018). Female senior managers are more inclined to adopt flexible management methods, like to participate in corporate activities to interact with employees, and adopt a democratic way to manage and lead the enterprise. Terjesen et al (2016) found that the participation of female executives played a significant role in promoting enterprise technological innovation.

This study generally focuses on financial performance influenced by the proportion of women in the team in corporate governance. Different gender board compositions will necessarily differ in the formulation and implementation of corporate decisions. The gender-diversified board of directors can avoid the thinking blind spots of the board of directors, help to brainstorm, propose and develop more comprehensive plans, form reasonable and effective decision-making, improve the decision quality of the board of directors, and thus strengthen the corporate governance structure.

In addition, according to the differences in physiological and female and socio-cultural expectations, women are more cautious and conservative and prefer risk aversion. The existence of gender stereotypes and "symbolism", in the most cases, when there is only one female director, its symbolism is much more symbolic than practical, so their influence on board decisions is weak. Therefore, if in the board of directors, there are more female directors, it will play a certain buffer role in the overall decision and can avoid excessive investment by enterprises. Based on the above discussion, this paper proposes the following hypothesis

H1. The gender diversity has a positive influence on the corporate financial performance.

The Board of Director and Corporate Financial Performance: Resource Dependency and Principal-agent Theory

The board is the most important decision-making and management body of the company, the affairs and business of the company are under the leadership of the board. This study highlights the role of the board of directors on corporate financial performance and additionally the role of the internal control on corporate financial performance individually and as a moderating on the link between the board of director and corporate financial performance.

The board sustainable committee is the most important aspect of corporate governance, and it plays a significant role in promoting sustainable practices (Hussain et al., 2018). It can be seen from relevant data that the characteristics of the board of directors have different effects on the financial performance of enterprises. In addition, this study uses a variety of theories for properly supporting the role of the board of directors for corporate financial performance.

For example, firstly, this study uses the resource dependency theory, which sheds light on critical strategic resources that the board of directors must consider for the betterment of the corporation, such as knowledge, information, skills, experience, major constituents, and networks such as social groups, customers, decision-makers, experts, and suppliers (Hillman et , 2000; Wry et al., 2013). Wu report that the older the board members and the higher the educational level, the greater the role they play in consulting and advise company's strategic decisions, thus providing the necessary resources for senior managers to implement the strategic plan and thus improve the company's business performance, according to resource dependency theory. Furthermore, according to this view, board members play a significant role in corporate social and environmental activities (Pfeffer and Salancik, 2015). The theory of resource dependence believes that enterprises should change their board structure in accordance with the external environment to better meet the needs of the market (Trotman & Duncan, 2018).

Secondly, the principal-agent theory adoption, in which equity incentive links the interests of directors with the interests of shareholders and many directors of companies are shareholders of the company. When the company's performance improves, the interests of directors can also be guaranteed(Hillman and Dalziel, 2003). Based on this theory, implement the decisions of the shareholders' meeting, decide the daily operation and management of the company, and make the board of directors act as an agent; At the same time, with the right to hire or, dismiss the public, the manager of the department, play, the role of the agent. Based on this, dual identity, the behavior and composition of the board of directors will have an important impact on the business development of the company(Naciti, 2019). Therefore, building a scientific and effective board governance mechanism is very important for the development of the company.

Thus, these theories protect the right of all stakeholders and provide a competitive advantage. We use these resource dependency and principal-agent theories because of many reasons for supporting the role of the board of directors and corporate financial performance. The board always wants to have a good social reputation, and good corporate performance makes it possible.

Furthermore, Yang et al (2000) examine the China market and found that there is a negative correlation between the size of the board of directors and the performance of listed companies in China. In addition, Nguyen et al (2021) studied the relationship between directors' compensation and the company's performance. From their data, company performance tends to be significantly and positively correlated with directors' pay. It is therefore suggested that the remuneration of directors should be increased and that the proportion of unpaid directors should be minimized.

In addition, Zhang and He (2020) examines the influence of board of directors on the corporate financial performance. The study used the factor assay to assess study hypothesis using data from China-listed companies from 2012 to 2014. According to the findings, the number of board meetings is negatively correlated with company performance.

Through the resource dependency and principal-agent theory, the goal of this study is to investigate the influence of board features and governance quality on both individual components and environmental performance. To evaluate the data, the researchers used multilevel modeling using the GMM estimation methodology. The outcome implies that the corporate social responsibility and sustainability committee on the board of directors has a significant effect on environmental performance. Moreover, another study aims to add to the existing business strategy and environmental literature by examining the impact of governance structures on Chinese firms' environmental performance and, as a result, determining the extent to which governance mechanisms moderate the financial performance-environmental performance nexus (Nguyen et al., 2021). Their findings show that board size and governing board meetings are favorably related to the environmental performance of Chinese companies.

Similarly, another study investigated the relationship between the determinants of the board of directors and long-term performance. The results show that board changes also have a negative effect on performance (Belkhir, 2009). Li used a regression analysis of the relationship between the number of board meetings of directors in the real estate industry and financial performance, and found a negative correlation.

This study generally focuses on corporate financial performance which can improve the company's reputation. Listed companies attach great importance to the company's reputation, so the senior managers of the company pay more attention to the relevant work. The board of directors can be enhanced to improve decision-making efficiency, and effective corporate strategies can be implemented to maximize shareholder wealth (Gompers et al., 2003). According to most of the scholars, the board of directors has a significant relationship with corporate financial performance. In our view, many factors make this favorable link between the board of director. Normally, board members are supposed to be executives that are striving for the long-run survival of the firm. Based on the above discussion, this paper proposes the following hypothesis

H2. The board of director has a significant relationship with corporate financial performance.

The Role of the Internal Control: Agency and Principal Theory

The internal control has an important influence on the corporate financial performance. Many previous studies have found that internal control can improve the financial performance of listed companies. In this context, the agency theory sheds light on the importance of internal control for corporate financial performance. The higher the quality of internal control, the better the enterprise performance, this view has formed a consensus in the academic circle (Yang et al., 2020). Moreover, a sound internal control system can also help enterprises to establish a good credit system, improve the efficiency of resource utilization, reduce business risks, and improve their economic performance (Lu et al., 2021). Kinyua et al (2015) report that the more the internal control defects, the lower the financial performance.

Therefore, this study focuses on the agency theory for supporting the role of internal control in corporate financial performance. According to our point of view, the operation of internal control can ensure the realization of organizational goals, conducive to the company to achieve business goals, and then have a beneficial impact on financial performance. At the same time, internal control helps to improve the company's operating environment, help to the effective operation of the company, improve the operating efficiency and effect, that is, internal control plays an important role in improving the company's performance (Trotman & Duncan, 2018).

Moreover, Almashhadani and Almashhadani (2020) report that the positive impact of corporate governance on corporate performance can be enhanced by introducing an internal control system between corporate governance and corporate performance, which is even more significant in private companies. A meta-analysis study also backed the important of internal control in improving a corporate financial performance.

Corporate financial performance is investigated in another study. The study demonstrates that the better the quality of internal control, the better the financial performance of the enterprise, using two indicators of internal control in Shanghai and Shenzhen from 2007 to 2014 (Kinyua et al., 2015). Through regression analysis, the study shows that companies with more internal control defects have worse performance. It uses publicly available company data and Four indicator data for profitable corporate companies.

Most of the studies have supported the role of internal control in corporate financial performance. This study also believes that role of internal control has been increasing day by day. Especially, developing countries like China has many objectives to achieve. Gender diversity can mitigate internal control defects. Therefore, internal control is beneficial for corporate financial performance. Moreover, in addition, the high financial performance gives the company a good reputation, while internal control can help achieve it.

Furthermore, Jiang found that internal control promotes financial performance; Specific to the five elements of internal control, the internal environment, risk assessment and information communication are positively related to financial performance, and the role of control activities is uncertain, but internal supervision. This study uses system GMM, verify that good internal control can improve the financial performance of enterprises.

Financial reporting oriented and risk control oriented internal control can improve the accuracy of accounting data and the reliability of accounting information. Eniola and Akinselure (2016) studied nineteen aspects of internal control. According to his findings, the internal control of these nineteen aspects is positively related to financial performance. They find considerable support for our argument using the CCER database to rank the top 200 ROE companies in the listed market in Shanghai and Shenzhen in 2011. He found that the establishment, perfection and perfection and effective implementation of the internal control of listed companies in China have indeed significantly improved the financial performance level of enterprises.

H3: Internal control can improve corporate performance of listed companies.

Gender equality is crucial for attaining social development, enhancing economic growth, and promoting business performance, according to the 2030 Agenda. This study examines how the gender diversity influences internal control. They investigated the relationship between the proportion of female directors and the type of audit, determining if the internal control has a moderating influence.

The argument about gender diversity and internal is heating up. In this vein, an article explores the influence of internal control, evaluated using a variety of proxies, on gender diversity. They discovered that Internal controls strengthen the effect of the board's gender diversity (Tao et al., 2023). In order to effectively improve financial performance, the company is good to adjust the proportion of women.

Moreover, female executives are more conducive to improving company performance because they are more empathy, better understand consumer needs and create marketing strategies that satisfy them. At the same time, women's attitude towards risk aversion will make them pay more attention to the design of internal control, thus improving the quality of internal control in the company (Ud Din et al., 2021). Women on boards have a distinct function for social practices than men, and gender diversity captures better strategic decision-making (Bantel, 1993).

Carter believes that, relying on the theory of principal and agency, the conflict of interest between the principal and the problem of agent and agent will be weakened by the improvement of gender diversification of the board, and the corporate financial performance will also improve. This study uses the theory of principal and agency for supporting the moderating role of internal control for gender diversity and corporate financial performance because of many reasons. This study has a major aim to improve corporate financial performance, and it states that with the help of internal control the firm' financial performance can be improved.

H4: Internal control has a positive influence on the association between the gender diversity and the corporate financial performance.

Furthermore, an important relationship exists between the board and the internal control. Kinyua et al (2015) measures the quality of internal control by internal control defects. It is believed that the appointment of the chairman and the general manager by different personnel can help the company make up for the shortcomings in internal control, and thus improving the quality of internal control. However, higher quality of internal control can improve the financial performance of enterprises.

Besides, a diversified board of directors plays a positive role in promoting cooperation and communication among the members of the company's board of directors. Lawrence believes that the results judged by structural demographic characteristics are often unreliable. He believes that there may be no direct effect on the board structure and the company's performance. The company's performance is mainly affected by the medium of the board's effect on corporate governance. Darko et al (2016) believes that the leading cause variable that affects the company's performance is the governance effect, not the structural characteristics.

Therefore, new research has begun to pay more attention to the intermediary effect of internal control. Pasko et al (2021) found the intermediary role of internal control when influencing the performance of enterprises. This study uses agency theory for supporting the role of the internal control for corporate financial performance due to many factors. McCahery and Vermeulen (2014) also believe that the board of directors is the key to solving the problem of principal agency, because the board of directors has a strong supervision function, which can achieve the purpose of reducing agency costs. In a word, a reasonable and effective board governance mechanism and internal control system are very important to the company.

Most of the scholars support the role of internal control concentration for gender diversity and corporate financial performance, as well as the board of directors and corporate financial performance. The higher the financial performance of enterprises, the more valuable it is to enterprises in developing economies. In addition, gender diversity and board of directors have an important impact on internal controls, which play an important role in improving the performance of enterprises. Thus, internal control can be treated as moderating factor for gender diversity and corporate financial performance, as well as board and financial performance.

This study suggests the following hypothesis based on literature and theoretical perspective

H5: Internal control positively moderates the linkage between the board of director and the corporate financial performance.
The conceptual outline of the study is shown in Fig.1.

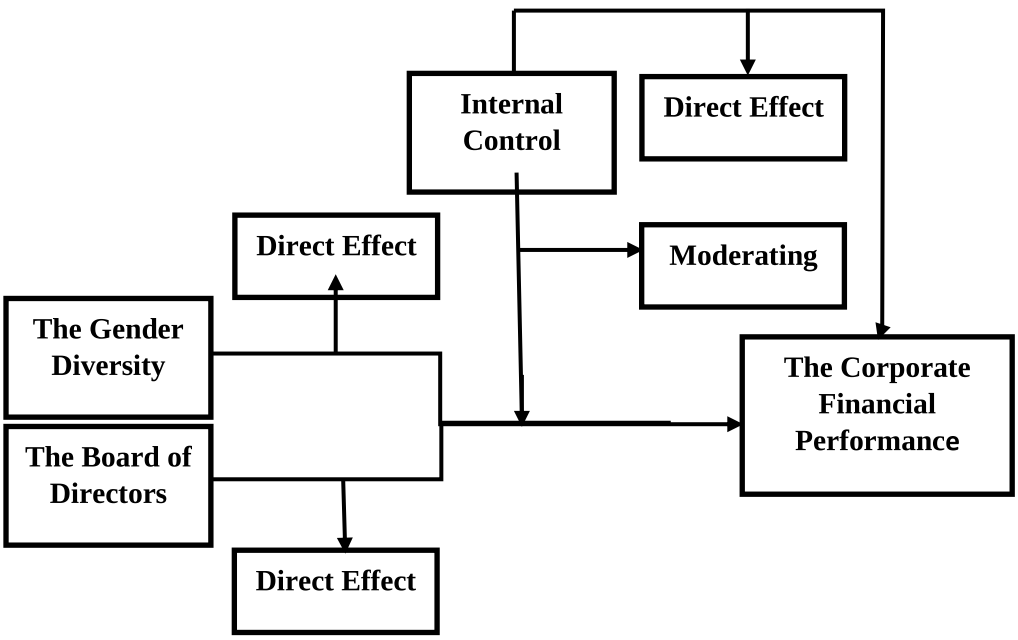

Fig. 1. Conceptual road map

Methodology

Data and Sample Selection

In 2012, China further expanded the mandatory implementation field of internal control, which means that the internal control system was officially implemented in batches among listed companies, which also shows that 2012 was a year connecting the development of China's internal control system to a more standardized level (Pasko et al., 2021). Therefore, in this study, Shanghai and Shenzhen stock exchanges are selected as China's class a stock market. We adopt the following selection criteria with a sample of A-share listed companies in China from 2012 to 2021. Firstly, as the capital structure of financial and insurance companies is quite different from that of companies in other industries, the financial and insurance industries are excluded; Secondly, delete ST and other specially treated company samples; Finally, we eliminate companies whose data is unavailable. The sample distribution is based on the China Securities Regulatory Commission's latest edition of Industry Classification Guidance for Listed Companies (CSRC). We gather patents data from the firm's annual reports and other important data from the China Stock Market and Accounting Research Database (CSMAR). Finally, 814 companies (8140 Observations) are chosen to complete this study.

Variable Measurement

Corporate Financial Performance

For rational findings, it is important to calculate the variables correctly, especially when using panel data (Mulatu et al., 2003). The measurement of corporate financial performance is critical because it is employed as a dependent variable in this study. Many studies use a variety of methods to calculate corporate financial performance at the corporate level. Feng et al (2018) uses EPS to reflect the company's performance. Shan et al.(2022) chooses the accounting indicator ROA that better reflects the stability and characteristics of the enterprise to measure the financial performance. Alfrera Papport, Jeffrey and other foreign scholars chose Tobin Q value, economic added value (EVA) as the measures of corporate performance studied. In this study, ROA is used to measure enterprise financial performance.

Table 1
Prior studies results.

References	Independent Variable	Dependent Variable	Result	Findings
Moreno-Gómez et al (2018)	*Gender diversity*	Corporate financial performance	Gender diversity is beneficial for corporate financial performance.	Positive
Smith et al (2006)	Gender diversity	Enterprise gross profit	The existence of gender diversity is beneficial for enterprise gross profit.	Positive
Zahra and Pearce (1989)	Board of director	Corporate financial performance	Board of director is beneficial for corporate financial performance.	Positive
Francoeur et al (2008)	Gender diversity	Corporate governance	It has positive and significant connection.	Positive

Zhang and He (2020)	Female executives	Corporate financial performance	Female executives have positive association with corporate financial performance.	Positive
Moreno et al (2018)	Gender diversity	performance of entrepreneurial organizations	Gender diversity have a significant and positive impact on the performance of entrepreneurial organizations.	Positive
Uadiale (2010)	*Board size*	Corporate financial performance	There is a significant positive correlation the size of the board of directors and the financial performance.	Positive
Meng et al (2018)	Independent director	Corporate financial performance	An increase in the proportion of independent director will have a negative impact in the short run.	Negative
Koufopoulos et al (2008)	Senior management age	Corporate financial performance	The older the senior executives are, the higher the company's performance is.	Positive
Eniola et al (2016)	Internal control	Corporate financial performance	Effective internal control can significantly improve the corporate financial performance.	Positive
Kinyua et al (2015)	Internal control quality	Corporate financial performance	Internal control quality is beneficial for corporate financial performance.	Positive
Dunn and Sainty (2009)	Director' shareholding	Corporate financial performance	There is no link between the director' shareholding and corporate financial performance.	Negative

The Gender Diversity

The independent variable is the gender diversity. The proportion of females on the board is used to calculate board gender diversity. This measurement of gender diversity is significant, according to Yasser et al (2017); Hyun et al (2016); Kassinis et al (2016), and has been utilized in previous studies. By following these studies, gender diversity is calculated as follows

Total Number of Women on Board/ Total Number of Board of Directors

The Board of Directors

The board of director is also considered an independent variable. In this research, we study the board from the perspective of the size of the board of directors. And the size of the board uses the number of members of the board as the data collection standard. Many academics have already utilized the same measurement for the calculation of the board size at the company level for greater validation of this measurement. According to these researchers, this board of directors plays an important part in the proper inquiry.

Internal Control

Internal control is employed as a moderating variable in this study. The natural logarithm of the DIBO internal control index is used to calculate the internal control quality. The comprehensive measure of the ability of enterprise internal control and the operational effect of internal control is called internal control quality. Multiple scholars have reported on the measuring of internal control.

Control Variables

For the best results, this study includes several control variables. First, equity nature is defined as a virtual variable of 1 when the company is a state-owned holding, and the value is 0. Second, the return on total assets of the current period is used as the alternative variable of profitability. Third, the net ratio of plant, property, and equipment is calculated as the net of plant, property, and equipment divided by total firm sales (Gompers et al., 2003).

Empirical Models

Panel data is employed in this study and discovered that panel data is frequently related to endogeneity issues (Bhagat & Bolton, 2008; Dittmar & Mahrt-Smith, 2007). The endogeneity problem is defined as an association between the error term and explanatory variables, resulting in skewed and untrustworthy results (Javeed et al., 2021). Furthermore, endogeneity bias is caused by unclear inferences, which can lead to ambiguous outcomes and inaccurate theoretical interpretation (Li, 2016). Despite this reality, the bulk of researchers has not addressed the issue of endogeneity when working with panel data. For example, 90% of published research on panel data do not address endogeneity issues (Antonakis et al., 2010; Hamilton and Nickerson, 2003).

Various scholars propose statistical solutions for controlling endogeneity flaws in this regard. For example, Li (2016) proposes several statistical tools for decreasing or eliminating endogeneity issues in panel data. First, he claims that endogeneity problems can be addressed using the third-factor effect and control factors. Second, he states that lags in expected variables may be used to solve this problem. Finally, he discovers that the instrumental variable technique is also a useful tool for addressing this issue. With a lagged explanatory variable method, observable and unobservable effects in panel data can be controlled. Fourth, he discovered that using a fixed effect model to account for the unobservable heterogeneous effect in panel data is a good idea. Finally, and most critically, he suggests using the generalized method of moments (GMM) for dealing with endogeneity. Several researchers have also endorsed the GMM technique for resolving this issue (Wintoki et al., 2012; Feng et al., 2018; Ullah et al., 2018). As a result, we employ fixed effect model and GMM model to accurately analyze in this study.

Fixed Effect Approach

A fixed effect model is a crucial tool for determining the relationship between independent and dependent variables within entities. The primary issue is that panel data suffers from unobservable heterogeneity (Schultz et al., 2010). The strict endogeneity of the firm's explanatory and forecasted variables demonstrates that there is no linkage between them (Wintoki et al., 2012). The fixed effect model is said to be the most effective method for reducing unobservable heterogeneity (Li, 2016; Javeed et al., 2021). Multiple authors have provided evidence for using the fixed effect tool to remove time-invariant issues and unobservable heterogeneity from panels (Manna et al., 2019; Wooldridge, 2010). Importantly, the fixed effect model is also known as a static panel model since it never allows the lag of the dependent variable to be substituted for the independent variable in econometric analysis (Wintoki et al., 2012). Finally, this study uses the fixed effect model and the random effect model for analysis after this evaluation. The value of the Hausman test is used to determine whether a fixed effect or random effect model should be used (Li, 2016; Javeed et al., 2021).

Generalized Method of Moments (GMM)

Terjesen et al (2016) developed the GMM technique for panel data analysis, which is also known as the dynamic panel model. The association between factors changes throughout time. When conducting empirical analysis for exogenous or endogenous factors, the GMM approach is thought to be the most effective in resolving these challenges. Furthermore, this method is particularly well suited to generating reliable equation evaluations (Feng et al., 2018). In general, the lags of anticipated variables can be utilized using the GMM technique. As a result, these variables lags are a very useful tool for dealing with endogeneity in panel data (Wooldridge, 2015).

For dealing with endogeneity, the GMM model uses "internal modifying data" (Javeed et al., 2020). Internal modifying data is a statistical circumstance in which prior value of a variable is subtracted from its current value. This strategy is particularly useful for lowering the number of observations required, and it improves the proficiency of GMM approach. It incorporates specific effects for changing coefficients, the GMM model is the greatest technique for removing endogeneity from panel data (Wintoki et al., 2012; Ullah et al., 2018; Fernandes et al., 2018; Li, 2016). To find optimal results, this study uses the GMM model to cope with panel data concerns.

Feasible Generalized Least Square (FGLS)

When data exhibit a high degree of correlation among residuals, feasible generalized least square (FGLS) is a method for evaluating the unknown framework in a linear regression model (Wooldridge, 2015). Aitken (1936) finds FGLS for the first time in 1934. When dealing with heteroskedasticity, FGLS is the most suited technique. When the variance of the independent variables is not equal, the Ordinary Least Square (OLS) method may become inefficient because the findings are unclear, causing estimators to make incorrect inferences. In general, the FGLS model is separated into two stages: when the regression equation is divided by one size deflator in the evaluation process to reduce the biased results, and when the regression equation is divided by one size deflator in the evaluation process to minimize the biased results (Lu et al., 2021). Second, there is likelihood that the erroneous terms in the equation will be associated in sequential order (Bhagat and Bolton, 2008). As a result, the likelihood of sequential connection may lead to skewed results. Thus, the FGLS model is utilized in this study as a robustness test to improve the accuracy of the results.

$$\mathrm{ROA_{i,t}} = \alpha_1 + \beta_1\mathrm{GD_{1i,t}} + \gamma_1\mathrm{z_{i,t}} + \mu_{i,t}(1)$$
$$\mathrm{ROA_{i,t}} = \alpha_2 + \beta_2\mathrm{GD_{2i,t}} + \gamma_2\mathrm{z_{i,t}} + \mu_{i,t}(2)$$
$$\mathrm{ROA_{i,t}} = \alpha_3 + \beta_3\mathrm{GD_{3i,t}} + \gamma_3\mathrm{z_{i,t}} + \mu_{i,t}(3)$$
$$\mathrm{ROA_{i,t}} = \alpha_4 + \beta_4\mathrm{GD_{4i,t}} + \beta_5\mathrm{IC_{5i,t}} + \beta_6\mathrm{GD} * \mathrm{ID_{6i,t}} + \gamma_4\mathrm{Z_{i,t}} + \mu_{i,t}(4)$$
$$\mathrm{ROA_{i,t}} = \alpha_5 + \beta_9\mathrm{GD_{7i,t}} + \beta_8\mathrm{IC_{8i,t}} + \beta_9\mathrm{BOD} * \mathrm{ID_{9i,t}} + \gamma_5\mathrm{Z_{i,t}} + \mu_{i,t}(5)$$

Econometric Equations

From this equation, $ROA_{i,t}$: represents corporate financial performance of firms i at year t, $GD_{i,t}$: reveals gender diversity, $BOD_{i,t}$: show board of director, $IC_{i,t}$: shows internal control, GD*$IC_{i,t}$: shows the interaction between gender diversity and internal control and BOD*$IC_{i,t}$: shows the interaction between board of director and internal control firms i at year t, $Z_{i,t}$: Control variables of firm i at year t; $\mu_{i,t}$: Error term; α_n: Constant term, n = 1; Coefficients to be estimated; m = 1,2,3,4,5,6,7,8,9.

Results

The descriptive data for corporate financial performance, gender diversity, board of director, internal control, and control factors are shown in Table 3. This table displays the mean and standard deviation values. Furthermore, Table 3 also reveals the Pearson correlation test values. Table 3 presents the results of the Pearson co-efficient correlation analysis which shows the correlation between GD and corporate financial performance with moderating role of IC, as well between BOD and corporate financial performance with moderating role of IC. Most of the variables reveal a positive and significant association. Similarly, all the control variables also reveal a positive and significant connection. This test consists of a significance level at 1% and 5%.

Table 2
Sample firms

NO.	Sector	Companies	Percentage
1.	Science and technology promotion and application services	2	0.246%
2.	Repair of motor vehicles, electronics and household products	3	0.369%
3.	Non-metallic ore mining and dressing industry	4	0.491%
4.	Construction and installation industry	10	1.229%
5.	Agriculture, forestry, animal husbandry and fishery services	10	1.229%
6.	Housing construction industry	14	1.720%
7.	physical education	14	1.720%
8.	Forestry	19	2.334%
9.	Catering industry	20	2.457%
10.	Loading, unloading, handling and transportation agency	25	3.071%
11.	Leasing industry	25	3.071%
12.	Ferrous metal mining and dressing industry	35	4.300%
13.	Rail transport industry	38	4.668%
14.	Comprehensive utilization of waste resources	42	5.160%
15.	Postal industry	43	5.283%
16.	Research and experimental development	47	5.774%
17.	Fishery	47	5.774%
18.	Culture and art industry	48	5.897%
19.	Accommodation industry	48	5.897%
20.	Oil and gas extraction	51	6.265%
21.	Wood processing and wood, bamboo, rattan, palm and grass products industry	59	7.248%
22.	Leather, fur, feathers and their products and footwear industry	63	7.740%
23.	Warehousing	67	8.231%
24.	Educate	80	9.828%
	Total	**814**	**100%**

Table 4 shows the results of fixed effect and GMM approach for as-sociation between GD and corporate financial performance, BOD and corporate financial performance, IC and corporate financial performance. Firstly, model 1 presents that GD has positive influence on corporate financial performance and the BOD has significant relationship with corporate financial performance, values with fixed effect approach (β=0.330, p=0.05), and values with gender diversity and corporate financial performance, as well board of director and corporate financial performance with the effect of internal control. Model 4 shows the interaction values of GD and IC (GD*IC) (β=0.003, p=0.01, β=0.009, p=0.01) with fixed effect and GMM model respectively. Finally, these findings support hypothesis four which stated that internal control plays a positive role as a moderator for association between gender diversity and corporate financial performance. Moreover, model 5 presents the interaction (BOD*IC) (β=0.016, p=0.01, β=0.178, p=0.01) with fixed effect and GMM model respectively. These results also confirm the last hypothesis which explained that internal control is a valuable moderator for positivity between board of director and corporate financial performance.

Additional Analysis

As robustness test, this study employs an additional test to validate the results. This study uses feasible generalized least squares analysis to undertake extra data analysis for the robustness test (FGLS). Table 6 depicts a total of five models that represent the relationship between gender diversity and corporate financial performance, board of director and corporate financial performance, internal control and corporate financial performance, moderating role of internal control on linkage between gender diversity and corporate financial performance, and moderating role of internal control on linkage board of director and corporate financial performance. Model 1 represents the values of GD with corporate financial performance (β=0.037, p=0.01), model 2 shows BOD with corporate financial performance (β=0.022, p=0.01), model 3 reveals IC and corporate financial performance (β=0.066, p=0.01), model 4 presents the interaction GD*IC (β=0.116, p=0.01), and model 5 shows the interaction BOD*IC (β=0.071, p=0.01). Hence, all these values with the FGLS technique also confirm the findings of all hypotheses with previous techniques.

Discussion

Corporate decision-making has a significant impact on the corporate governance structure. In the context of increasingly fierce global competition, higher requirements are raised for the effectiveness of corporate governance. How to occupy the market share in the changing market environment and improve the financial performance is the core problem of enterprise thinking (Lu et al., 2021). In this context, the goal of this research is to look at the characteristics that can help a company to achieve long-term success.

Table 3
Descriptive Statistics and Pearson Correlation

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1.ROA	0.038	0.138	1										
2.BOD	8.479	1.674	0.058**	1									
3.IC	649.989	88.419	0.222**	0.113**	1								
4.GD	0.103	0.076	0.131**	0.191**	0.050**	1							

Table 3
Descriptive Statistics and Pearson Correlation

Variables	**M**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
5.BODIC	5528.267	1387.657	0.169**	0.846**	0.611**	0.181**	1						
6.GDIC	67.172	51.995	0.192**	0.207**	0.209**	0.975**	0.282**	1					
7.OC	57.740	15.115	0.095**	0.041**	0.163**	-0.083**	0.119**	-0.052**	1				
8.FS	22.293	1.352	-0.005	0.259**	0.162**	0.047**	0.300**	0.075**	0.185**	1			
9.LEV	0.430	0.216	0.051**	0.131**	-0.029**	0.072**	0.095**	0.076**	-0.059**	0.455**	1		
10.PPE	0.212	0.162	-0.026**	0.140**	-0.046**	0.027**	0.090**	0.021**	0.038**	0.088**	0.052**	1	
11.ATO	0.619	0.534	0.048**	0.022**	0.119**	-0.004	0.082**	0.019**	0.023**	0.037**	0.130**	-0.011	1

Significance levels: * $p<0.05$ ** $p<0.01$

ROA reveals corporate financial performance, BOD reveals board of director, IC reveals internal control, GD reveals gender diversity, OC reveals ownership, FS shows firm size, LEV reveals leverage, PPE highlights the ratio of plant, property, and equipment, ATO shows asset turnover.

Table 4
Results of link between GD and ROA, BOD and ROA, IC and ROA

	Model 1		Model 2		Model 3	
Dependent Variable/ Independent Variable	**FE**	**GMM**	**FE**	**GMM**	**FE**	**GMM**
Intercept	0.330** -8.573	0.215** -3.094	0.300** -7.57	-0.182 (-1.597)	0.154** -3.941	-0.269** (-2.665)
OC	0.002** -19.089	0.001** -14.352	0.002** -18.255	0.001** -4.902	0.002** -15.584	0.000* -2.502
FS	-0.025** (-14.990)	-0.015** (-3.531)	-0.025** (-14.821)	0.002 -0.486	-0.023** (-14.043)	0.001 -0.184
LEV	0.284** -39.163	0.141** -3.033	0.303** -41.39	-0.132 (-1.873)	0.310** -43.025	-0.076 (-1.560)
PPE	-0.150** (-12.282)	-0.033** (-6.740)	-0.154** (-12.477)	-0.043** (-6.153)	-0.144** (-11.813)	-0.002 (-0.224)
ATO	0.010** -3.27	0.006** -2.959	0.009** -2.749	0.012** -3.865	0.001 -0.312	0.004* -2.204
GD	0.456** -26.85	0.189** -4.893				
BOD			0.009** -10.023	0.022** -3.03		
IC					0.001** -28.756	0.000** -4.731
R 2	-0.104	0.02	-0.121	-0.076	-0.071	0.018
R 2(within)	0.113	0.02	0.088	-0.077	0.068	0.018
F	F (6,22361) =472.974, p=0.000		F (6,22361) =360.077, p=0.000		F (6,22361) =492.255, p=0.000	
Wald χ2		χ2(6) =561.201, p=0.000		χ2(6) =564.418, p=0.000		χ2(6) =681.563, p=0.000

Dependent Variable： Return on total assets (ROA)
Significance levels: * p<0.05 ** p<0.01; T value in brackets.

Table 5
The moderating results

	Model 4		Model 5	
Dependent Variable/ Independent Variable	**FE**	**GMM**	**FE**	**GMM**
Intercept	0.236**	0.363*	0.288**	1.344*
	-6.173	-2.079	-6.006	-2.088
OC	0.002**	0.000**	0.002**	0.001**
	-15.318	-3.541	-15.138	-8.134
FS	-0.020**	0.002	-0.023**	-0.003
	(-12.222)	-0.506	(-13.934)	(-0.733)
LEV	0.266**	-0.088	0.306**	-0.051
	-37.338	(-1.505)	-42.399	(-1.171)
PPE	-0.132**	-0.012*	-0.143**	-0.013*
	(-11.152)	(-2.327)	(-11.726)	(-2.535)
ATO	0.001	0.006**	0.001	0.005*
	-0.425	-3.053	-0.172	-2.537
IC	0.000*	-0.001	0	-0.002*
	-2.388	(-1.934)	-0.629	(-2.057)
GD	-1.348**	-5.894**		
	(-18.048)	(-2.788)		
GDIC	0.003**	0.009**		
	-24.216	-2.865		
BOD			-0.016**	-0.178*
			(-4.453)	(-2.331)
BODIC			0.000**	0.000*
			-6.051	-2.376
R 2	-0.001	-0.039	-0.062	-0.036
R 2(within)	0.162	-0.039	0.119	-0.036
F	F (8,22359) =541.007, p=0.000		F (8,22359) =378.748, p=0.000	
Wald χ2		χ2(8) =577.960, p=0.000		χ2(8) =726.725, p=0.000

Dependent Variable： Return on total asset (ROA)

* p<0.05 ** p<0.01; T value in brackets.

Table 6
The robustness results with FGLS

	Model 1	Model 2	Model 3	Model4	Model5
Const	0.078	0.087	-0.024	0.164	0.242**
	-0.701	-0.762	(-0.231)	-1.19	-7.837
OC	0.001**	0.001**	0.001**	0.001**	0.001**
	-6.351	-6.368	-5.733	-6.003	-13.748
FS	-0.007	-0.008	-0.011	-0.011	-0.013**
	(-0.982)	(-1.114)	(-1.496)	(-1.538)	(-17.094)
LEV	0.048	0.052	0.071	0.056	0.069**
	-0.621	-0.657	-0.889	-0.746	-15.697
PPE	-0.027**	-0.031**	-0.013*	-0.018**	-0.019**
	(-4.167)	(-4.489)	(-2.327)	(-3.021)	(-3.721)
ATO	0.010**	0.009**	0.002	0.002	0.002
	-3.169	-2.892	-0.598	-0.591	-1.139
GD	0.253**	0.006**	0.000**	0	
	-4.803	-5.221	-9.098	-0.377	
BOD		0.006**		-1.904*	-0.027**
		-5.221		(-2.562)	(-8.603)
IC			0.000**		0
			-9.098		(-1.161)
GDIC				0.003**	
				-2.768	
BODIC					0.000**
					-9.983
R 2	0.037	0.022	0.066	0.116	0.071
Adjust R 2	0.037	0.022	0.065	0.116	0.071
F	F (6,25826) =83.301, p=0.000	F (6,25826) =81.347, p=0.000	F (6,25826) =99.075, p=0.000	F (8,25824) =147.781, p=0.000	F (8,25824) =117.026, p=0.000

Dependent Variable：Return on total asset(ROA)

The primary hypothesis of this study is that the gender diversity has a positive influence on the corporate financial performance. The findings of this investigation are supported by initial theory. Women's plans for long-term survival are superior to men's (Bullough et al., 2019). Previously, several authors have confirmed that female executives and male executives have different perceptions of one thing and can view the same thing and can view the same thing from different perspectives, thus providing different options for final decisions and ultimately improving the company's performance (Badal et al., 2014). Moreover, these findings also supported by numerous theories, for example, resource dependency, and human capital theories.

Moreover, companies with women on the board of directors have significant competitive advantages (Erhardt et al., 2003). Furthermore, females are more eager to serve on a sustainable board committee since they wish to improve the market image of firms (Ruigrok et al., 2006). This study verifies the impact of gender diversity on corporate financial performance. According to the theory of resource dependence, no organization is self-sufficient, and all organizations must obtain resources from the external environment in order to survive. Women on boards are also connected to the outside world, they can provide important information to senior executives for improving corporate financial performance.

Second, this study asserts that the board of directors has a significant relationship with corporate financial performance. The findings of this investigation also support the second hypothesis. Our results are consistent with prior studies (Harjoto et al.,2015; Byron and Post,2016). The board of directors has many characteristics, among which the characteristics of the board of directors have a more significant positive effect on financial performance, while the relationship between board meetings and financial performance is not significant, and some other characteristics are negatively correlated. Theoretically, these findings are supported by the resource dependency theory because enterprises should change their board structure in accordance with the external environment to better meet the needs of the market (Bullough et al., 2019).

Importantly, third hypothesis of this study propose that Internal control can improve corporate financial performance. The findings of this study show that internal control is critical for a high company financial performance. The quality of internal control is a part of the corporate governance structure, which is inherent in the corporate governance structure, but reacts on the governance structure. To further optimize and improve them, they have strong internal relations and are indispensable. In the process of corporate governance, the organic combination of governance structure and internal control can effectively promote the company to achieve better governance performance, fundamentally improve the company's financial performance and achieve good, rapid and sustainable development (Belkhir, 2009).

Fourth, the findings of our study suggests that internal control can have a good impact on the interaction between the gender diversity and corporate financial performance. The findings of this study show that internal control is critical for gender diversity and corporate financial performance. Female directors can effectively improve the internal control level of listed companies. The proportion of males in the board of directors of listed companies in China is too large, and the gender structure is unbalanced (Terjesen et al., 2016). Gender diversity can mitigate internal control defects. Therefore, internal control is beneficial for corporate financial performance. Moreover, in addition, the high financial performance gives the company a good reputation, while internal control can help achieve it. Carter believes that, relying on the theory of principal and agency, the conflict of interest between the principal and the problem of agent and agent will be weakened by the improvement of gender diversification of the board, and the corporate financial performance will also improve.

Lastly, this study states that the board of directors and corporate financial performance are positively related to the moderating role of internal control. Our findings are supported by several other researchers (Gaur et al., 2015; McCahery and Vermeulen, 2014; Garcia-Sanchez et al., 2021). Eniola and Akinselure (2016) measured the quality of internal control by internal control defects. It is believed that the appointment of the chairman and the general manager by different personnel can help the company make up for the shortcomings in internal control, and thus improving the quality of internal control.

Conclusion

With the passage of time, the phenomenon that women go out of their families and enter the workplace has become more and more common. They are undertaking more and more important work in the workplace and become corporate executives. Most researchers believe that corporate decision-making plays an important role in it. Furthermore, policymakers are taking a keen interest in gender diversity and the board of directors. This study argues that gender diversity and the board of directors, with the moderating function of internal control ,can play a positive role in improving corporate financial performance. For this study, panel data of Chinese 814 Stock Market and Accounting Research Database (CSMAR) (8140 Observations) are collected for the period 2012-2021.

Furthermore, this study uses a variety of statistical techniques, including the fixed effect, GMM model, and the FGLS model for robustness. Following an empirical review, this study concludes that gender diversity and the board of directors are critical for corporate financial performance. In addition, the moderating influence of internal control on the association between the gender diversity and corporate financial performance, as well as board of directors and corporate financial performance are explored in this study. Second, internal control can help firm's improv financial performance. Importantly, this study highlights that the moderating function of internal control enhances the linkage between the gender diversity and corporate financial performance. Lastly, the findings of this study reveal that the moderating role of internal control is found to have a favorable impact on the linkage between the board of directors and corporate financial performance.

Implications and limitations

In this study, the relationship between the gender diversity and corporate financial performance is explored with the moderating influence of internal control. This research offers a variety of recommendations and implications for managers, owners, institutions, governments, and policymakers. This study confirms the need for gender diversity. It is recommended that enterprises appropriately increase the proportion of women in enterprises. Furthermore, the importance of internal control for the improvement of corporate financial performance is highlighted in this study. Policymakers should improve the quality of internal control to improve long-term development.

Furthermore, the findings of this study point out the importance of internal control for board of directors and corporate financial performance. The board of directors is the core of the company, and their judgments are more important in the company. As a result, the company should improve the board of directors as a whole to improve its financial performance. Furthermore, this study suggests introducing directors who not only have high academic qualifications but also have rich industrial work experience to improve the knowledge structure and management efficiency of the board of directors and promote the improvement of company performance.

Other corporate governance aspects can be investigated as this study has some limitation. Further research directions are also suggested. Internal control are used as moderators in this study, but other essential aspects, for example ownership concentration could be used as moderators and mediators in the future studies. Importantly, this research is limited to Chinese market data; however, in the future, additional developing and developed countries may be investigated. The Stock Market and Accounting Research Database (CSMAR) is investigated in this study, but other areas could also be investigated in the future, especially the firms of small and medium enterprises.

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