Journal of Asian Scientific Research
ISSN(e): 2223-1331
ISSN(p): 2226-5724
DOI: 10.55493/5003.v15i2.5486
Vol. 15, No. 2, 270-282.

URL: www.aessweb.com

The impact of female directors' individual characteristics on corporate financial performance: Evidence from China's a-share listed companies

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Article History
Received: 29 April 2025
Revised: 19 June 2025
Accepted: 4 July 2025
Published: 22 July 2025

Keywords
China
Corporate competitiveness
Education
Financial expertise
Firm performance
Overseas experience
Work experience.

ABSTRACT

This study investigates how the individual traits of female directors influence corporate financial performance in the context of Chinese listed firms. While prior research has largely emphasized the general impact of gender diversity, this paper focuses on specific attributes such as age, education, overseas experience, financial expertise, and professional background to assess their effects on board decisions and market outcomes. Drawing on a large sample of firms, the study adopts a quantitative approach to examine the variability in these traits and their correlation with financial performance indicators. The findings reveal that not all female directors contribute equally; instead, their unique backgrounds play a significant role in shaping strategic decisions and enhancing firm outcomes. Notably, educational diversity, international exposure, and financial skills emerge as key traits linked to stronger financial results. This study shifts the focus from gender representation to the diversity of qualifications and experiences among women directors, providing a more nuanced understanding of board dynamics. The implications are relevant for policymakers and corporate leaders aiming to improve board effectiveness through targeted appointments. The research contributes to the literature on corporate governance by highlighting the strategic value of trait-based diversity and offers insights for optimizing board composition in a competitive global business environment.

Contribution/ Originality: This study uniquely investigates the effects of individual characteristics of female directors rather than gender alone on firm performance in China's A-share market, offering empirical evidence on how specific traits influence strategic decisions and financial outcomes.

1. INTRODUCTION

As global interest in stronger corporate governance standards increases, board gender diversity is viewed as an enabler of richer discussions and debate, greater innovation, and possibly higher firm value [1, 2]. Still, most empirical research utilizes simplistic female-director head-count ratios to study board performance and implicitly assumes the same effects from all female directors. This oversimplification overlooks theoretically important human capital issues (e.g., age, financial expertise, academic credentials) and social capital issues (e.g., international experience, industry networks) that affect how all women directors monitor, advise, and/or mobilize resources [3, 4]. Evidence is especially scarce in emerging markets: in the case of China, there are only a handful of papers studying female directors and even fewer that trace their individual attributes and how these causally influence financial outcomes [5, 6]. This study uniquely analyzes how the specific traits rather than gender alone of female directors impact corporate performance in China's A-share market.

Using Upper Echelons theory and the human/social capital perspective, this study develops a multi-attribute index of women directors and applies it to approximately 4,500 firm-year observations of A-share listed companies in China (2014–2023). A two-part modeling approach first links the attributes of directors to strategic financial decisions, and then to ROA and Tobin's Q. The study clarifies which attributes are significant, the reasons behind their importance, and the contextual factors that influence value creation in China's rapidly evolving corporate governance environment. This enhances gender-diversity theory and provides nomination committees with a practical toolkit for targeted board recruitment [7].

The purpose of this study is to examine the individual attributes of female directors and their contributions to the financial performance of Chinese companies, with a specific focus on how economic-related attributes such as educational background, age, overseas experience, and financial expertise contribute to corporate governance and financial decision-making. In doing so, we focus on these specific research questions:

1. Does the age of female directors influence corporate financial decision-making?
2. How do female directors with different educational levels (e.g., PhD, Master's, Bachelor's) impact corporate financial decisions?
3. Can female directors with professional backgrounds effectively enhance corporate financial performance?
4. How does overseas experience influence the strategic decision-making abilities of female directors?
5. Do female directors with financial expertise affect corporate financial performance?
6. Can academic backgrounds effectively contribute to improving corporate performance?

This study expands the research on female board members from multiple dimensions, particularly by exploring how individual characteristics such as age, educational background, professional experience, overseas exposure, financial expertise, and academic qualifications impact corporate performance. In doing so, it fills several gaps in the existing literature. Most current research focuses on gender differences among female directors, with few studies delving into how their personal traits influence corporate decision-making and financial outcomes [1]. By introducing a detailed analysis of individual characteristics, this study uncovers the complex mechanisms through which gender diversity affects corporate performance, contributing to the theoretical development of the field of corporate governance diversity.

From a practical perspective, the findings of this study provide a scientific basis for companies to select and develop board members as part of their diversity strategies. In the context of increasingly fierce global competition, how companies can enhance corporate performance through a diverse board structure particularly by leveraging the multifaceted attributes of female directors has become a pressing management issue. Through empirical analysis, this study identifies the specific traits of female directors that can help firms achieve better outcomes in financial management, capital structure optimization, and innovative decision-making, thereby offering theoretical support for the formation of senior management teams. Furthermore, this research promotes greater societal attention to gender equality and diversity, playing an active role in advancing the inclusion of women in senior management and breaking the "glass ceiling." By demonstrating the varied impacts of female directors from different backgrounds on corporate performance, this study not only emphasizes the importance of gender equality but also highlights the value of diversity in enhancing corporate competitiveness. It thus provides empirical data to support changing societal perceptions of gender and advancing the cause of gender equality.

The structure of this paper is as follows: Section 2 reviews the literature, Section 3 outlines the methodology and case selection, Section 4 presents the results and hypothesis testing, and Section 5 provides recommendations and discusses limitations.

2. LITERATURE REVIEW

2.1. Theoretical Background

2.1.1. Agency Theory

Agency theory primarily addresses the relationship between stakeholders and corporate management [8]. It is based on the premise that a company's board not only has the capability to resolve agency conflicts but also plays a crucial role in the control and oversight of management [9]. According to agency theory, women can promote effective competition by ensuring that operational business is governed internally. Through their skillset, women can further enhance decision-making quality and overall business performance [10]. Agency theory is one of the principal theories explaining how gender diversity in business management can positively influence corporate financial performance [11]. Gender diversity can be included as an important part of corporate governance [12]. Gender diversity can be an important aspect, in a theoretical context, in ensuring corporate management independence through diverse perspectives, and it may become imperative in helping to strengthen the company's independence [13]. Additionally, gender diversity could be a tool to reduce costs associated with agency conflicts and ultimately improve corporate governance. It could also be demonstrated that gender diversity might potentially lead to decreased costs related to conflicts through agency mechanisms [14].

2.1.2. Upper Echelon Theory

According to agency theory, women can promote effective competition by ensuring that operational business is governed internally. Through their skillset, women can further enhance decision-making quality and overall business performance [10]. Agency theory is one of the principal theories explaining how gender diversity in business management can positively influence corporate financial performance [11]. Gender diversity as a result can be included as an important part of corporate governance [12]. Gender diversity can be an important aspect, in a theoretical context, in ensuring corporate management independence through diverse perspectives, and it may become imperative in helping to strengthen the company's independence [13]. Additionally, gender diversity could be a tool to reduce costs associated with agency conflicts and ultimately improve corporate governance. It could also be demonstrated that gender diversity might potentially lead to decreased costs related to conflicts through agency mechanisms [14]. A review of the relevant literature reveals that past studies on corporate performance have primarily focused on gender diversity in general, with a noticeable lack of research on the individual characteristics of female board members. This gap suggests that further exploration is warranted.

2.2. Hypothesis Development

In terms of age, it is generally assumed that a female director is likely to have more experience, particularly in the business environment, where the most appropriate course of action is not readily visible and where long-term risks can be managed. Senior female directors would be useful in stabilizing corporations' decision-making under uncertain economic conditions, and hence support companies in making the right decisions that could ultimately lead to improvements in financial performance when faced with economic uncertainty [15].

H_1: The age of female directors has a positive effect on corporate performance.

Education has been described as the third most significant factor affecting team decision-making capacity and corporate governance. Female directors in higher education would be able to apply professional knowledge and systematic methods of decision-making behaviors that ought to optimize a firm's financial management and strategic decisions, and therefore positively impact the firm's corporate performance. Individuals who make the appropriate all-round education available to responsible and active governance should be able to reconcile the financial interests of stakeholders and pose a natural challenge to traditional management. The public image is an indication of finding their community service role in the act of combining ethical financial performance with stakeholder interests [1].

H_2: Female directors with higher education have a positive influence on a company's financial performance.

In a globalized business world, female directors with overseas experience can provide companies with international recognition by exploring global conditions that affect corporate and market exchanges. From this experience, they can assist companies with international development, global expansion strategies, and market entry internationalization efforts. Therefore, a female director's experience is highly valuable in creating opportunities as global actors and analyzing their related global risk management strategies to enhance financial performance [2].

H_3: Female directors with overseas experience can enhance a company's international strategy and financial performance by leveraging their global exposure and market insights.

Female directors with a financial expert background generally possess specialized knowledge of the capital markets, financial planning, and controls used to manage risk. They can improve the capital structure, financing, and financial planning of the corporation, which, in turn, should enhance the overall financial performance of the firm. Adams and Ferreira [1] indicated that directors with financial expertise are better able to improve the capital market performance of the firm.

H_4: Female directors with financial expertise can improve corporate financial performance by enhancing the capital structure, financing decisions, and financial planning of the firm.

Female directors with a professional background generally offer industry-level insights and specialized knowledge that can be quite advantageous in operations, technological innovation, and marketing strategies. In this way, these kinds of directors can help corporations make better strategic decisions with additional accuracy in competitive environments while also producing efficiencies in their operations and market competitiveness that should positively impact long-term growth and financial performance of the firm. [16] found that directors with expertise in professional domains offered more sophisticated management advice, which improved the overall performance of the corporation.

H_5: Female directors with professional backgrounds will be able to use their industry experience and extensive management expertise to improve operational decisions and corporate competitiveness, thereby enhancing financial performance.

Likewise, female directors with academic experience usually have a broader, future-oriented perspective and exceptional research skills. These directors can integrate theory with implementation in ways that could help corporations innovate and advance research and development (R&D) activities supporting technological innovation and the execution of sustainable development strategies. Hambrick and Mason [17] found that directors with academic expertise provided different perspectives on corporate strategy, which enhanced the firm's competitiveness in making technology innovation decisions and investments in R&D.

H_6: Female directors with academic expertise can enhance corporate financial performance by strengthening innovation and R&D decision-making, thereby increasing a firm's technological competitiveness.

3. RESEARCH METHODOLOGY AND CASE DESCRIPTION

3.1. Data Source and Sample Selection

To ensure accuracy and broad coverage, this study uses 2023 annual report data from all listed companies in China's A-share market across various industries. The data are sourced from the widely recognized China Stock Market and Accounting Research (CSMAR) database, which is commonly used in both academic and professional research on corporate finance and governance in China. Its comprehensive scope enhances the representativeness and reliability of the study's sample.

This research will utilize cross-sectional data analysis to identify differences among individual firms within the same time period. Cross-sectional data analysis considers firm characteristics at a specific point in time and is well-suited for examining the impact of these characteristics on financial performance. Using cross-sectional data provides a means to assess multiple variables influencing corporate financial performance through an analysis of firm characteristics. Regarding female directors, the CSMAR data repository offers extensive and detailed information on individual firms and has been a valuable analytical method previously used in corporate governance studies related to financial performance [18]. Therefore, by utilizing multidimensional information on listed companies, a cross-sectional study will enable the research to thoroughly examine the relationship between corporate governance and financial performance in China's A-share market.

3.2. Research Model and Variables

This study employs a multiple linear regression model to analyze the impact of female directors' individual characteristics on corporate performance. The model uses Return on Assets (ROA) as the dependent variable, and the key independent variables include: Age—the actual age of female directors, used to measure their accumulated experience and decision-making style. Educational Background—classified based on the educational qualifications of female directors. Financial Expertise—a binary variable (0/1) indicating whether the female director has a financial background. Overseas Experience—a binary variable (0/1) indicating whether the female director has overseas study or work experience. Academic Background—a binary variable (0/1) indicating whether the female director has an academic background. Professional Title Background—a binary variable (0/1) indicating whether the female director holds a professional title. In addition, the model includes several control variables such as company size (measured by the natural logarithm of total assets), current ratio, operating profit margin, and earnings per share to account for other potential factors influencing performance. These variables are commonly used as controls in studies on corporate governance and board diversity [2, 5].

The regression model is formulated as follows:

$$xi = \beta 0 + \beta 1 Age + \beta 2 Degree + \beta 3 FinanceBackground + \beta 4 OverseasExperience + \beta 5 Academic + \beta 6 Profession + \beta 7 ControlVariables + \epsilon i$$

xi represents the composite indicator of corporate performance. β1 to β6 denote the regression coefficients for the characteristics of female directors. ϵi is the random error term.

3.3. Robustness Test

To ensure the robustness of the regression results, this study conducted a normality test on the residuals to verify the reliability of the model. Additionally, a multicollinearity test was performed by calculating the Variance Inflation Factor (VIF) to confirm that there are no serious multicollinearity issues among the independent variables [19].

4. CASE DESCRIPTION

This study is based on the 2023 annual report data of China's A-share listed companies, covering thousands of firms and their board structures. These companies represent all types of enterprises across China. The study comprehensively examines the impact of female board members' personal characteristics on Chinese listed companies across several key dimensions. The sample includes 5,032 manufacturing companies listed on China's A-share market (A-shares are RMB-denominated common shares issued by companies registered in mainland China, listed domestically, and available for purchase and trading by domestic institutions, organizations, or individuals). The study uses cross-sectional data from a one-year period. After accounting for the personal characteristics of female directors during the study period and excluding cases with missing data, the study yields 14,481 valid observations.

4.1. Measurement

4.1.1. Dependent Variable

Return on Assets (ROA), as the central dependent variable of this study, is one of the most popular variables in the literature dealing with the financial performance of companies. ROA is meaningful because it measures how effectively a company is using its assets to generate net income, thus serving as a valid measure of overall company operations. It is calculated by dividing net income by average total assets and shows how well management is using its resources, making it one of the main financial measures of profitability [20].

In corporate governance, it is common to see ROA as the primary measure of financial performance when assessing how board structure, governance characteristics, or strategic decision-making affect financial outcomes. For example, Usman et al. [21] used ROA as a measurement tool to evaluate how board diversity and governance capacity influence company performance, thereby validating its use as a standard metric for corporate performance.

ROA is popular not only because it can reflect the profitability of the company, but also because it is easy to calculate and allows for straightforward comparison of financial performance across companies and industries [22]. As such, ROA is considered an ideal variable for exploring financial performance and assessing the relationship between corporate governance and financial performance, especially when examining board diversity, management decision-making, and internationalization strategies as outcomes of financial performance.

4.1.2. Independent Variables

Age: The age of female directors is used as a measurement indicator in this study.

Educational Background: The educational background of the board is assessed using the mean level of education among members of the board. The highest level of education was scored according to the following scale: a doctoral degree was scored as 5, a master's degree as 4, a bachelor's degree as 3, an associate degree as 2, and a high school diploma (or equivalent) and below as 1. Advanced executive programs, such as an MBA or EMBA, were scored as equivalent to a master's degree.

Financial Background: Female directors are assigned a value of 1 if they possess a financial background and 0 otherwise. This binary variable captures the presence of financial expertise on the board.

International Experience: Female directors are coded as 1 if they have overseas study or work experience, and 0 if not. This binary variable reflects their international exposure, which is distinct from nationality or ethnicity.

Academic Background: Female directors are coded as 1 if they have academic or research experience, and 0 otherwise. This dummy variable captures the presence of academic expertise on the board.

Background of Female Directors by Professional Title: Female board members are categorized based on whether they hold a professional title. Those with a professional title are assigned a value of 1, while those without are assigned a value of 0. These dummy variables are used to measure the professional title background of female board members.

4.1.3. Control Variables

Total Assets: Total assets represent the total value of a company's assets and serve as a key indicator of company size and financial capacity. Total assets are typically used as a control variable because company size often has a significant impact on financial performance and other key metrics such as profitability and market performance.

Current Ratio: The current ratio represents a company's ability to meet short-term debt obligations and is a crucial indicator of liquidity and short-term financial health. It is commonly used as a control variable because it significantly influences a company's operational capability and financial stability.

Operating Profit Margin: Operating profit margin reflects the profitability of a company's core business operations and serves as a key indicator of operational efficiency and cost management. It is often used as a control variable because it directly impacts the company's overall profitability and shareholder returns.

Earnings per Share (EPS): Earnings per share represent the net income generated for shareholders and are a key indicator for evaluating a company's profitability and investment value. EPS is frequently used as a control variable since it directly influences market valuation and investor confidence.

In a multiple regression model, these control variables help adjust for the effects of differences in company size, financial structure, debt capacity, and operational efficiency, enabling a more accurate capture of the true impact of key independent variables such as leadership on corporate performance.

4.2. Empirical Results

This study employs multiple linear regression analysis to evaluate the influence of the independent variables on the dependent variables outlined above.

$F(11, 14469) = 812.64$, $Prob > F = 0.0000$: The F-test results indicate that the overall model is statistically significant, meaning that the selected independent variables collectively have explanatory power for the dependent variable (ROA, Return on Assets). This supports the validity of the model, and the F-value and p-value demonstrate that the overall structure of the model is sound.

R-squared = 0.3819, Adjusted R-squared = 0.3814: The R-squared value indicates that the selected variables explain 38.19% of the variation in ROA. The adjusted R-squared (38.14%) accounts for the number of variables, suggesting that the model has strong explanatory power.

Root MSE = 0.0586: The root mean square error (RMSE) represents the average difference between the predicted values and the actual values. A smaller RMSE indicates that the model has a good fit.

Table 1 presents the results of the multiple linear regression analysis, showing the effects of female directors' characteristics and control variables on corporate financial performance as measured by Return on Assets (ROA).

Table 1. Regression results for the effect of female directors' traits on ROA.

Source	SS	df	MS	Number of obs.	=	14,481		
Model	30.69	11	2.790	Prob>F	=	0		
Residual	49.68	14,469	0.00343	R-squared	=	0.382		
Total	80.38	14,480	0.00555	Root MSE	=	0.0586		
ROA	Coefficient	Std.	err.	t	P>|t|	95%	conf.	interval
Age	0.000256	6.15e-05	4.160	0	0.000135	0.000376		
Degree	-0.00200	0.000563	-3.550	0	-0.00310	-0.000893		
Funback new	0.000401	0.000226	1.770	0.0760	-4.25e-05	0.000845		
Academic new	7.91e-05	0.00162	0.0500	0.961	-0.00309	0.00325		
Profession new	0.00334	0.00109	3.070	0.00200	0.00121	0.00548		
OveseaBack new	-0.00271	0.00201	-1.350	0.178	-0.00665	0.00124		
IsCocurP	0.000840	0.00147	0.570	0.567	-0.00204	0.00372		
TotalAssets	-0	0	-6.700	0	-0	-0		
CurrentRatio	0.00160	0.000128	12.47	0	0.00135	0.00185		
OperatingProfitMargin	0.000492	5.00e-05	9.840	0	0.000394	0.000590		
EarningsPerShareEPS	0.0349	0.000385	90.63	0	0.0341	0.0356		
cons	-0.00581	0.00380	-1.530	0.126	-0.0133	0.00163		

4.3. Variable Analysis

Age has a significant positive effect on ROA, with a coefficient of 0.0002557 and a p-value of 0.000. This indicates that as the age of board members increases, company performance (ROA) improves. The positive relationship may be attributed to the accumulation of experience and enhanced decision-making abilities of older directors. This result supports hypothesis H1.

The effect of the degree on ROA is significantly negative, with a coefficient of -0.0019972 and a p-value of 0.000. This suggests that directors with academic degrees may be associated with lower company performance, potentially because directors with academic backgrounds may focus more on theoretical knowledge rather than practical management. This result contradicts hypothesis H2.

The impact of overseas experience on ROA is not significant, with a p-value of 0.178. This may indicate that, after controlling for other variables, overseas work or study experience has a limited effect on company performance or board effectiveness. This result does not support hypothesis H3.

The effect of financial background on ROA is not significant (p-value = 0.076). This suggests that, after controlling for other variables, directors with financial expertise contribute little to company performance, or their impact is not statistically significant. This result does not support hypothesis H4.

Professional background has a significant positive effect on ROA, with a coefficient of 0.003345 and a p-value of 0.002. This indicates that directors with professional backgrounds positively influence company performance, likely due to their industry experience or technical skills, which help companies better navigate market challenges. This result supports hypothesis H5.

The impact of academic background on ROA is not significant, with a p-value of 0.961. This suggests that directors with academic backgrounds have minimal influence on company performance, possibly due to a disconnect between academic research and practical business operations. This result contradicts hypothesis H6.

Total assets have a significant negative effect on ROA, with a coefficient of -4.23e-14 and a p-value of 0.000. This indicates that larger companies tend to have lower returns on assets, possibly due to economies of scale or increased management complexity leading to reduced efficiency.

The current ratio has a significant positive effect on ROA, with a coefficient of 0.0015977 and a p-value of 0.000. This suggests that companies with stronger short-term debt repayment capabilities tend to have higher returns on assets.

Operating profit margin has a significant positive effect on ROA, with a coefficient of 0.0004923 and a p-value of 0.000. This indicates that companies with stronger profitability have higher returns on assets.

Earnings per share has a highly significant positive effect on ROA, with a coefficient of 0.0348757 and a p-value of 0.000. This indicates a strong positive correlation between EPS and company performance, likely because EPS is a key indicator widely followed by the market and effectively reflects a company's financial health.

4.4. Robustness Test

4.4.1. Residual Normality Test

The Residual Normality Test is an essential method for assessing the assumptions of regression models, specifically aimed at evaluating whether the residuals (i.e., the differences between observed and predicted values) conform to a normal distribution. In this study, we use a residual normal probability plot, commonly referred to as a Q-Q plot, to examine the normality of residuals within the regression model.

Figure 1 illustrates the normal probability (Q-Q) plot of residuals, indicating that the regression residuals generally conform to a normal distribution, thereby validating the model's assumptions.

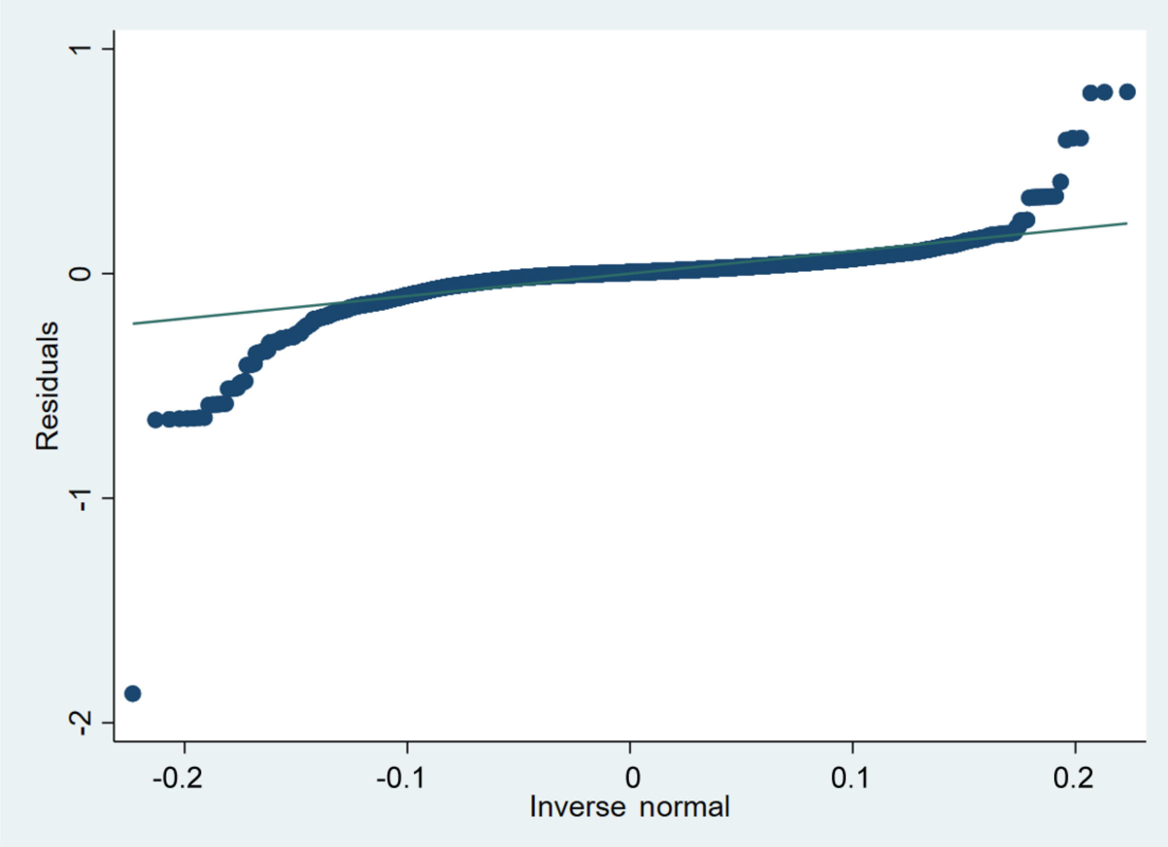

Figure 1. Q-Q plot of regression residuals for normality test.

This is a residual normal probability plot, commonly referred to as a Q-Q plot, used to assess the normality of residuals in the regression model. The plot indicates that most residuals in the central portion align along the diagonal, suggesting that the residuals are approximately normally distributed. Since this study focuses on the overall trend of the data and the regression analysis of key data points, with outliers having minimal impact on the conclusions, this result is acceptable.

4.4.2. Multicollinearity Test

This study uses the Variance Inflation Factor (VIF) to detect multicollinearity. Table 2 presents the VIF values for all independent variables. All values are below the critical threshold of 10, confirming the absence of multicollinearity.

Table 2. Variance inflation factor (VIF) for independent variables.

Variable	VIF	1/VIF
Academic new	1.440	0.695
Degree	1.290	0.775
Profession~w	1.250	0.800
Age	1.180	0.845
OveseaBack~w	1.050	0.950
TotalAssets	1.040	0.965
EarningsPe~S	1.030	0.969
CurrentRatio	1.030	0.970
Funback new	1.030	0.971
IsCocurP	1.030	0.972
OperatingP~n	1.010	0.992
Mean	VIF	1.130

The Variance Inflation Factor (VIF) is a method used to determine multicollinearity. The larger the VIF, the stronger the correlation between a given variable and the other variables. Typically, a VIF of 10 indicates a serious case of multicollinearity. The VIF results in this study show that there are no multicollinearity problems present in the model's independent variables. All VIF values are significantly below 1.5, indicating low correlation between the independent variables and suggesting stability in the regression coefficient estimates.

4.5. Conclusion

The findings of this research study provide a comprehensive exploration of the relationship between individual director characteristics and corporate financial performance (ROA). The study offers noteworthy insights that contribute to the field of corporate governance. Firstly, it empirically demonstrates a strong positive association between director age and career background with corporate financial performance. Directors gain managerial experience and industry-specific knowledge with age, which enhances their ability to engage in management and decision-making processes that are complex, thereby positively influencing the firm's performance. These findings are significant for observational evidence of risk management and understanding how risk varies with age. The study emphasizes the importance of experience in corporate governance, indicating that older directors tend to provide a more mature strategic perspective for the firm. Similarly, directors with relevant career background experience or industry knowledge in specific sectors have a stronger capacity to influence corporate decisions, leading to increased competitiveness and financial performance. Secondly, it is noteworthy that educational level was negatively associated with corporate financial performance, contrary to expectations. Typically, higher education levels among board members are presumed to enhance governance and decision-making capacity. However, the negative correlation may suggest that more educated directors might pursue theoretical explanations for problems, which may not always translate effectively into management and strategic implementation decisions. Additionally, the characteristics of the sample, such as individual or company-specific factors, may limit the influence of certain variables. For example, overseas experience might have a complex impact on corporate performance due to cultural or industry differences, making it difficult for a single variable to capture its true effect. Given the importance of director characteristics, future research could explore additional background variables or include interaction terms to better understand how these characteristics influence corporate performance.

5. CONCLUSION AND LIMITATIONS

This study provides empirical evidence at the academic level regarding the effects of individual director characteristics on corporate performance and offers practical advice for companies on how to best organize their boards. The findings indicate that individual characteristics, including age and professional background, are associated with financial performance in various ways. They highlight the value and relevance of experienced directors, the need for practical skills, and managers' understanding of financial management. While the findings have several implications for talent selection and board composition, examining the effects of certain individual characteristics of directors on corporate performance can help corporate organizations make better director selections based on the study's findings.

The data and sample used in this study are from China, and the study results cannot be immediately generalized or transferred beyond the data collection setting. Specific aspects of corporate governance structures and cultural contexts can differ dramatically from one country to another, and as a result, the effects of individual director characteristics on corporate performance may differ substantially. Therefore, the findings evaluated for external validity need to be reviewed further. Future research could also assess the extent of universality of the effects of director characteristics on corporate performance in a cross-country investigation.

Additionally, this research employs a coverage of 'cross-sectional' or 'snapshot' data. This means that the trendline of the individual characteristics of directors' impact on corporate performance cannot be accounted for over a specified time period. As the nature of directors' influence is likely to change over time, for example, the experience that is acquired collectively by directors over time may be more likely to have a greater long-term influence on corporate performance than a comparatively smaller short-term effect. Future investigations could apply longitudinal research to assess the ability of individual characteristics of directors to impact corporate performance over time.

Funding: This study received no specific financial support.
Institutional Review Board Statement: Not applicable.
Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

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