Vol
INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES
14, Issue 12, (2024) E-ISSN: 2222-6990

Examining the Impact of CEO Characteristics (Gender and Education) on Managerial Ability in Companies Listed on the Indonesian Stock Exchange

Geodita Woro Bramanti, Sri Yayu Ninglasari, Berto Mulia Wibawa, and Aditya Fajar Ramadhan
Department of Business Management Faculty of Creative Design and Digital Business, Institut Teknologi Sepuluh Nopember
Corresponding Author Email: geodita@its.ac.id

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v14-i12/24176 DOI:10.6007/IJARBSS/v14-i12/24176

Published Date: 16 December 2024

Abstract
The development of corporate management is intricately linked to the attributes of the Chief Executive Officer (CEO). Research indicates that the presence of more female leaders is linked to enhanced decision-making procedures, leading to favourable results for shareholders. Moreover, the attributes of a business executive enhance the overall effectiveness of corporate management. Hence, the objective of this study is to perform a comprehensive examination of how the attributes of a Chief Executive Officer impact their abilities in managing. The research sample comprises 527 non-financial companies that are publicly traded on the Indonesia Stock Exchange during the period from 2018 to 2022. Data analysis employs panel data regression techniques and utilizes the Fixed Effect Model (FEM) with the Generalized Least Square (GLS) method. Research indicates that the educational background of a CEO has a substantial influence on their managerial abilities. Nevertheless, the gender of a CEO does not exert any influence on their managerial capabilities. This occurs due to the structural and cultural barriers in Indonesia, where traditional gender roles and patriarchal norms limit the professional advancement of women. This study makes a substantial contribution to our understanding of corporate governance and leadership. It highlights the significance of educational qualifications for business executives and emphasises the necessity of formal education and professional development in fostering capable leaders. It emphasises the importance for policymakers and organisational stakeholders to actively encourage gender inclusivity and diversity in leadership positions
Keywords: Managerial Ability, CEO's Gender, CEO's Education

Introduction

According to Demerjian et al. (2013), managerial competence has a beneficial influence on both the company and its stockholders. Prior research has mostly focused on the notion that management skill serves as a predictive element or an inherent characteristic of a manager (Chen et al., 2015; Koester et al., 2017; Baik et al., 2018; Lee et al., 2018). Corporate Executives are entrusted with the task of enhancing the value of the firm for the benefit of shareholders (Jensen & Meckling, 1976). Therefore, advancements in managerial skills should stem from the connection between CEOs and the essential qualities that are important to them.

In recent years, general ability and management ability have emerged as regularly used markers for assessing the competence of business executives. In their study, Custódio et al. (2013) quantified a comprehensive ability index by considering many aspects, including the business executive's former positions, the number of companies under their management, and their industry-specific experience.

Demerjian et al. (2012) assert that the main determinant of managerial effectiveness is the degree to which managers efficiently transform company resources into revenue. The components included are inventory costs, administrative costs, tangible assets, operational leases, historical Research and Development (R&D), and intangible assets. It is crucial to emphasise that management ability specifically relates to the performance of a company, while general ability encompasses the entirety of a chief operating officer's professional career.

Andika et al. (2022) conducted a study which found that most chief executive officers in major publicly traded companies in Indonesia have obtained a university degree or higher education qualifications. Most individuals (48%) have attained an undergraduate degree, as indicated by their highest level of education. Nevertheless, 40% of individuals with a master's degree adhere to this practice. The overall proportion of individuals with postgraduate degrees, encompassing both master and doctoral degrees, stands at 46%. Most chief operating officers who possess a master's degree have obtained it in a business-related field, such as an MBA. Similarly, most chief operating officers who hold a doctoral degree possess a doctorate in a field related to business. This discovery is consistent with research that suggests leaders with postgraduate degrees in business-related fields outperform those without such degrees (Raja et al., 2016; DasGupta & Pathak, 2021; Quoc Trung, 2022). Managers who possess strong capabilities have a profound comprehension of the operational environment, exhibit innovative thinking, and make intelligent investment decisions, all of which have a positive influence on firm performance (Demerjian et al., 2012). Furthermore, they could efficiently manage any risks and possess a thorough comprehension of both potential hazards and opportunities within the market (Yung & Chen, 2018). Proficient managerial skills empower companies to cultivate innovation, optimize production, and effectively secure finances (Phan et al., 2020).

Apart from rising educational attainment, the percentage of female managers increased from 26.63% in 2017 to 30.63% in 2019, according to data derived from the central statistics agency. This information indicates that the proportion of Indonesian businesses led by women will increase in a positive way. Gender diversity is regarded as a significant attribute in a chief executive officer (Kirsch, 2018). The influence of gender diverse Chief executive officers has been demonstrated to be substantial by virtue of their oversight responsibilities and advisory contributions (Byron & Post, 2016). Female leaders are specifically regarded as having a more stringent oversight function over management (Adams & Ferreira, 2009). Furthermore, they are anticipated to offer managerial support through the contribution of a broader range of skills, qualifications, and perspectives (Kim & Starks, 2016). The productivity and efficacy of an organization may be enhanced by gender equality (Fernando et al., 2020).

Prior research findings validate the significance of gender and business executive education in promoting the growth of management skills. Consequently, researchers conducted a study to examine the correlation between gender diversity and education in the position of Chief Executive Officer, with a specific emphasis on enhancing managerial abilities. This study employs the managerial competency measures developed by Demerjian et al. (2012) to assess the efficacy of management in converting firm resources into income.

Literature Review

Managerial Ability

Managerial ability encompasses the aptitude, expertise, and sagacity of a manager in proficiently and productively overseeing corporate assets to attain organizational objectives. Managerial ability significantly influences the success of a firm, as seen by its productivity, investment choices, remuneration, and overall performance. Studies indicate that the distinct attributes of managers, such as their abilities, skills, and talents, have a significant impact on the performance of companies, particularly in the domains of finance, accounting, and managerial research (Demerjian et al., 2012). Competent managers employ strategic measures to effectively leverage corporate resources over an extended period (Bhutta et al., 2021). They have a propensity for embracing risks, a behaviour that is linked to the augmentation of firm worth (Yung & Chen, 2018). Proficient managers possess a deep understanding of the operational landscape of the organization, which empowers them to make astute investment choices and enhance overall company performance (Phan et al., 2020).

Chief Executive Officer

The CEO's position in a company has a substantial influence on the strategic direction and decisions, particularly in relation to innovation and Research and Development (R&D) expenditure. The business executive, as the paramount authority within the organization, assumes various pivotal responsibilities that shape the company's innovation strategy. leader decisions are influenced by various characteristics including tenure, age, share ownership, work experience, gender, and education level. Yunlu and Murphy (2012) found that business executives who have been in their position for a longer time tend to prioritize stability and efficiency above innovation. Similarly, Hambrick and Mason (1984) discovered that older leaders may be more inclined to allocate R&D money in a conservative manner.

Chief Executive Officer Characteristic

Gender in CEO leadership refers to the specific biological sex of an individual who holds the position of Chief Executive Officer in a business. Juniarto and Jie (2024) define Gender Diversity as the presence of an equal number of men and women who are closely involved in corporate governance, which refers to the rules and practices for managing and overseeing a company. Providing women with more opportunities in top management enhances the independence of the board, as stated by Bjuggren et al. (2018). Research indicates that having balanced gender representation on the board of directors improves the management of organisational conflict. This is because women are recognised for their ability to deescalate conflict situations, promoting harmony and fostering greater trust (Earley & Mosakowski, 2000). This information highlights the significance of recognising diversity in leadership as a crucial measure for promoting inclusive and progressive corporate governance.

Education is a significant factor in the process of selecting a leader, as stated by King et al. (2016). Higher education is commonly regarded as a valuable asset for making strategic decisions and influencing the trajectory of a company. Custódio and Metzger (2014) contend that leaders with a master's degree in business possess enhanced proficiency in managing financial and investment strategies, consequently leading to higher levels of profitability. Behavioural finance theory suggests that executives with an MBA education often exhibit an abundance of self-assurance due to their belief that their superior education provides them with a greater level of comprehension.

Research conducted by Bertrand et al. (2003) and King et al. (2016) supports the notion that CEOs with a master's degree in business exhibit a higher inclination towards aggressive strategy implementation and a greater propensity to take risks, aligning with these principles. Behavioural finance theory. Empirical research indicates that leaders with a solid educational background are more inclined to make well-informed and strategically calculated business decisions (Smith et al., 2006). Hence, possessing a thorough understanding of a chief executive officer's educational achievements is a crucial aspect in comprehending the influence of their educational background on a company's decision-making process and overall sustained prosperity.

Conceptual Framework

The purpose of this research was to examine the relationship between gender and education variables on managerial abilities. This was done by using a series of regression equations in the Conceptual Framework Model (Figure 1). The research methodology employed in this study was built upon prior research conducted by Baghdadi et al. (2023) and Fernando et al. (2020), which investigated the impact of CEO gender on managerial capabilities. Additionally, the study by Amore et al. (2019) examined the influence of CEO education on company performance.

The Influence of CEO Gender on Managerial Ability

The gender of CEOs has been a captivating subject of research in the fields of management studies and economics. Studies indicate that the presence of a diverse range of genders among business executives can significantly enhance their capacity to effectively utilize corporate resources to generate income (Baghdadi et al., 2023). Within a framework that recognizes the importance of managerial qualities for a firm's success (Demerjian et al., 2012), it is argued that Chief executives play a crucial role in improving these capabilities. Studies indicate that having a diverse gender representation in leadership positions might enhance innovation and creativity. This is because female leaders offer distinct viewpoints and employ diverse managerial strategies (Baghdadi et al., 2023). Furthermore, gender has an impact on risk-taking behaviour, as female business executives tend to engage in more cautious risk-taking, whereas male business executives are more inclined to take greater chances (Huang

& Kisgen, 2013). These disparities impact managerial tactics and can ultimately impact the overall profitability of the organization. The theory presented in this study is as follows:
H1. The gender of a CEO has significant effects on the executive abilities of companies listed on the BEI (Indonesian Stock Exchange).

The Influence of CEO Education on Managerial Ability
The educational background of a chief operating office is a crucial determinant of a company's managerial capabilities. The primary objective of this study is to examine the influence of leader education on environmental attitudes in the context of corporate decision making (Amore et al., 2019). The formal education of a leader, particularly with a bachelor's or graduate degree in a relevant discipline, imparts a profound comprehension of management principles and corporate strategy. Business executives with advanced education typically possess superior analytical and decision-making abilities. Moreover, the amalgamation of substantial professional experience with formal education cultivates leaders who possess profound expertise and significant practical know-how. According to Morresi (2017) , leaders who have a strong educational foundation and a wide range of managerial experience are better equipped to efficiently handle complicated business difficulties. Furthermore, the education of the chief executive officer serves as a catalyst for promoting business environmental innovation. The significance of the effect persists even after doing a series of tests to ensure the consistency of variable specifications, estimating methodologies, accounting for missed components, and addressing probable endogeneity issues (Zhou et al., 2021). Therefore, the proposed hypothesis is:

H2. The education level of CEOs has significant effects on their managerial skills in companies that are listed on the BEI (Indonesian Stock Exchange).

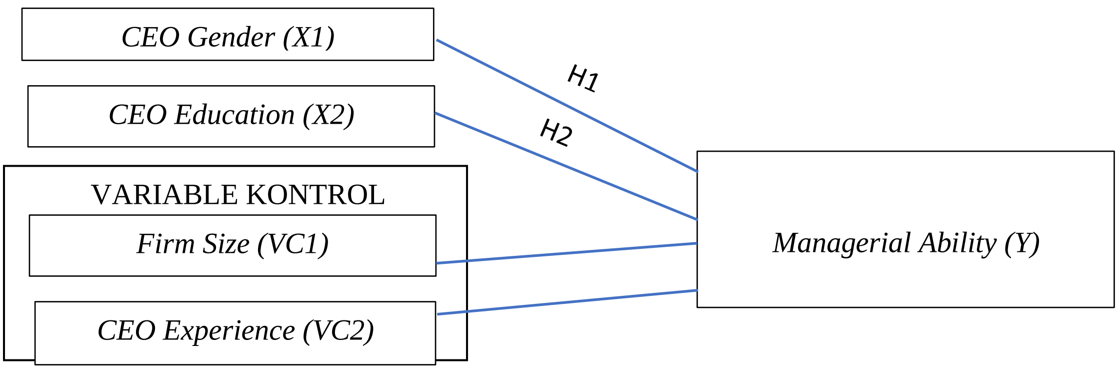

Figure 1. The Proposed Conceptual Model/Framework

Research Methodology
This study utilizes secondary data obtained from annual financial reports and annual reports spanning from 2018 to 2022. These reports are sourced from companies listed on the Indonesia Stock Exchange (BEI). This study utilizes a sample of 527 non-financial companies that are listed on the Indonesia Stock Exchange.

The dependent variable in this research is Managerial Ability (Y). The MA-Score algorithm, developed by (Demerjian et al., 2013), can be utilized to evaluate a company's managerial competence by analysing its efficiency value. Independent variables are factors that influence changes in the dependent variable. In this research, we will be examining the factors of CEO Gender (X1) and CEO Education (X2). Female leaders are represented by 1 in this study, while male leaders are denoted by 0. This variable is utilized to assess the impact of having a female CEO on strategic decision making and the overall success of the organization. In addition, CEOs with advanced degrees are indicated by 1, while lower levels of education are indicated by 0. This study incorporates two control variables: Company Size and CEO Experience.

The study was conducted in three phases, which included Data Envelopment Analysis (DEA), Tobit Regression, and Panel Data Regression Test.

1. The first step requires identifying and standardising input variables, such as Cost of Goods Sold, Selling and Administrative Expenses, Productive Fixed Assets, Operational and Rental Costs, R&D Costs, Goodwill, and Other Diamonds. In addition, output variables, such as Sales, are also identified and normalised to maintain consistency in both the scale and dimensions of the variables. Subsequently, the Data Envelopment Analysis (DEA) technique is utilised to ascertain determine the company's relative efficiency by comparing the output generated with the input utilized.
2. In the second phase, Tobit Regression is utilised, with the efficiency outcome from the DEA phase serving as the dependent variable. The independent variables consist of the Logarithm of Total Assets, Market Share, Free Cash Flow, Logarithm of Company Age, Business Segmentation, Foreign Exchange Rates, and Company Age. The Tobit regression model was chosen because it is suitable for analysing dependent variables that are limited within specific ranges, such as efficiency values that range from 0 to 1. The regression equation is as follows:

Efficiency $= \beta + \beta\, LnTA + \beta\, MS + \beta\, Pos\_FCF + \beta\, LnAGE + \beta\, Bus\_Seg + \beta 6 Foreignt + Year + Industry + \varepsilon t$

The tobit regression equation is used to calculate the ABLT value, which stands for Adjusted MA-Score, Cost of Goods Sold, Selling and Administrative Expenses, Net PP&E, and other factors. This value serves as an indicator of the company's managerial ability. A high ABLT value signifies strong managerial skills, while a low value suggests the opposite.

3. Panel Data Regression Testing is conducted in the third stage. The Residual Value (ABLT) is the dependent variable, while the independent variables consist of CEO characteristics such as gender and education level. In addition, other control variables, particularly company size and CEO experience, are considered. The selection of a panel data regression model is customised to the assumptions and attributes of the data, such as a panel data linear regression model with either random effects or fixed effects. A panel data regression model was employed to assess the influence of CEO attributes, specifically gender and education, on the managerial aptitude of the organisation. The subsequent equation represents the model utilised in this study:

MA = β0+ β1Gen+β2Edu+β3Size +β4Exp + ϵi

MA : Managerial ability
β : Coefficient variable
Gen : CEO Gender
Edu : CEO Education
Exp : CEO Experience
ϵi : error

The estimated findings were then interpreted to elucidate the relationship between these variables. Furthermore, statistical tests were conducted to assess the significance of the coefficients of the independent variables, as well as to examine the assumptions of the panel data regression model, including heteroscedasticity, autocorrelation, and multicollinearity

Results and Discussions

Regression Model Test

Before constructing the model, a multicollinearity test was first carried out. The correlation between the variables was initially investigated using the Pearson correlation test. The Stata software was employed to analyse the correlations of the key research variables and investigate potential influence relationships in order to gain a more comprehensive understanding of the interrelationships among the variables. The value falls within the range of 0 to 1, with a higher number indicating better performance. The VIF (Variance Inflation Factor) is the reciprocal of the tolerance value, and a value greater than 10 indicates the presence of a multicollinearity problem. Table 1 presents the relevant findings.

Table 1

The Results of Multicollinearity test

Variable	**VIF**	**Tolerance (1/VIF)**
VC1	2,91	0,343724
VC2	2,28	0,438735
X1	1,09	0,918547
X2	1,56	0,642699

The findings underline that the VIF values for every variable were less than 10, affirming the absence of collinearity issues. Therefore, regression analysis could be conducted. Second, A test for heteroskedasticity and serial autocorrelation has also been performed to identify their existence. Wald test was used to test for panel level heteroskedasticity, and the findings confirm the presence of heteroskedasticity, as indicated in Table 2.

Table 2

Test for Panel Level Heteroskedasticity

P-Value	
0,0000	Heteroskedasticity

The Wooldridge test for serial correlation was utilized to test for autocorrelation. The Wooldridge test results also indicate the existence of first-order autocorrelation in the models. Table 3 displays the outcomes of the autocorrelation test.

Table 3

Wooldridge Test for Autocorrelation

F-Statistic	**P-Value**
131	0,0000

Regression Result

The classical assumption test results suggest the existence of autocorrelation and heteroscedasticity. Consequently, the Generalised Least Square (GLS) method is implemented to resolve the concerns of autocorrelation and heteroscedasticity, as recommended by Gujarati and Porter (2009). The subsequent data presents the coefficient results and P values obtained from the GLS test.

Table 4

The Generalized Least Square Result

Variable	Coefficient (β)	P-Value	Result Description
CEO Gender (X1)	0,176394	0,262	Positive; No influence
CEO Education (X2)	0,0218147	0,013	Positive; Have an influence
Firm Size (VC1)	-0,0007176	0,707	Negative; No influence
CEO Experience (VC2)	0,0079381	0,343	Positive; No influence

The regression model results indicate that only the education variable demonstrates a probability value that is lower than the 5% significance level (0.013). The data suggests that a leader's educational achievement has an impact on their managerial abilities. Therefore, these findings offer substantiation for hypothesis H2. Our research hypothesis that gender disparities in the length of time business executives hold their positions will positively influence their abilities in managing dynamics. Nevertheless, it appears that this does not impact on a chief executive officer's ability to oversee the company. Therefore, these findings provide evidence to refute hypothesis H1.

Discussions

This research is based on the concept of agency theory, which suggests that the executive manages a company with the goal of maximising shareholder value and works through the board of directors. In contrast, several researchers argue that the personal characteristics of leaders influence the performance of their companies (Kaur & Singh, 2018; Jadiyappa et al., 2019; Johan & Sari, 2020). The attributes encompass age, gender, educational attainment, and professional background.

Our research findings suggest a direct correlation between education and the aptitude of business executives in effectively managing their organisations. According to King et al. (2016), there is a correlation between the educational attainment of a leader and their managerial skills. leaders with a strong MBA education are more likely to take risks and implement innovation in their company operations, resulting in better performance outcomes compared to leaders without an MBA background. This phenomenon occurs because companies led by leaders who hold master's degrees in business education are able to generate higher profits. Moreover, as indicated by the study conducted by Custódio and Metzger (2014), Business Executives who have attained higher education possess superior skills to effectively oversee their financial and investment strategies. Furthermore, they demonstrate heightened levels of decisiveness when implementing solutions (King et al., 2016). The company's capacity to generate higher profits is directly influenced by this, as evidenced by the research conducted by (Lam et al., 2013), (Custódio & Metzger, 2014), and (Green & Homroy, 2018). These findings suggest that in order to succeed in the growing Indonesian market, business leaders must have both a high level of education and advanced skills in risk management and strategic decision making. Therefore, this emphasizes the need for greater emphasis on managerial education in Indonesia, encompassing both formal education and professional development, to cultivate corporate leaders who possess the skills to successfully navigate the intricacies and fluctuations of the market.

Furthermore, the research revealed that there was no discernible correlation between the manager's ability and gender variables. The results of this study contradict the conclusions drawn by Fernando et al. (2020), as they suggest that improving gender diversity has a significant beneficial effect on managerial abilities and performance results, particularly during periods of crisis. However, it is important to consider the disparity in the ratio of male and female leaders in Indonesian companies. In 2018, the proportion was 26.63%, which rose to 28.97% in 2019. The scarcity of female managers in Indonesia may have reduced the statistical significance of the analysis. Tania and Hesniati in 2022 study uncover a dearth of female leaders in Indonesia, with a predominant inclination among companies to assign men to decision-making positions. Men can benefit from occupying positions in companies that offer enhanced opportunities for professional development and advancement. Tania and Hesniati (2022) ascribe occupational segregation to gender stereotypes. According to the International Labour Organisation (2020), hierarchical and patriarchal systems tend to favour men, which in turn creates barriers for women who aspire to attain higher-level managerial positions. Moreover, the presence of women in top-level executive roles in Asia, including Indonesia, is greatly restricted as a result of traditional gender norms that predominantly link women to household duties. Women are socially obligated to proficiently handle their duties as mothers, spouses, and working professionals while being employed. The convergence of these three factors frequently impedes women's advancement in their professional trajectories, rendering it rather surprising that women are mandated to serve on the most influential boards (Arquiosa et al., 2018).

This study additionally examines the impact of control variables, specifically the company's size and the business executive's experience, on managerial competence. The data presented demonstrate a statistically significant correlation between the size of a company and the level of managerial competence. The correlation between these two variables is negative, indicating that as organisations grow larger, their level of managerial proficiency tends to decrease. The results of this study align with the research conducted by Pramudya Wardhani (2021), which suggests that larger companies are more prone to facing complex financial difficulties and that the growth in company size can result in a decline in financial performance. Company expansion can lead to a decline in managerial effectiveness due to the increased complexity of the organisation that accompanies growth. Delegation presents substantial challenges for large corporations, hindering their managerial effectiveness. A complex framework can hinder the board of directors' ability to make timely decisions. The complex coordination and communication challenges in large companies may impede managers' capacity to efficiently oversee teams and allocate resources.

Moreover, the position of leader was acknowledged as an additional critical element that influences the level of managerial expertise within the company. Surprisingly, the study found no connection between how long a business executive has been in their position and how well they perform as a manager. Consistent with previous research, it was noted that as the chief executive officer's tenure increases and they reach middle age, their cognitive tendencies tend to align with conservatism. This conclusion is supported by several previous studies (Hambrick & Mason, 1984; Buchholtz et al., 2003; Henderson et al., 2006; Herrmann & Datta, 2006; Von den Driesch et al., 2015). It is widely believed that older business executives exhibit less enthusiasm and commitment towards innovative ideas compared to their younger counterparts. This belief is supported by several studies (Chown, 1960; Hambrick & Mason, 1984; Von den Driesch et al., 2015). Older managers are often inclined to maintain the current situation, as evidenced by previous research (Stevens, Beyer, & Trice, 1978; Von den Driesch et al., 2015). As a result, people frequently choose to engage in behaviours that are less risky and less innovative, as these behaviours provide a higher level of financial stability and security.

Conclusions

This study examines how CEO characteristics, such as education and gender, affect managerial abilities in non-financial companies listed on the Indonesia Stock Exchange. The results demonstrate a notable association between the level of education achieved by CEOs and their capacity to efficiently oversee and control organisations. Managers who possess advanced education, specifically those who hold MBA degrees, demonstrate improved abilities in risk management and strategic decision-making, resulting in superior performance outcomes. This underscores the crucial importance of formal education and professional development in nurturing skilled business leaders in Indonesia.

In contrast, the study concludes that gender diversity does not have a significant effect on managerial competence. The absence of a correlation between gender and managerial abilities contradicts previous research findings but can be ascribed to the limited presence of female leaders and the enduring cultural and structural obstacles in Indonesia. The results indicate that the hierarchical and patriarchal structures, in conjunction with conventional gender roles, restrict the potential influence of women leaders on managerial effectiveness. Furthermore, the study also reveals that larger corporations tend to have lower managerial aptitude as a result of heightened organisational intricacy, while shorter CEO terms are linked to greater managerial proficiency.

This study provides significant contributions to the current body of knowledge on corporate governance and leadership. The results emphasize the significance of educational credentials for business executives, highlighting the necessity of formal education and professional development initiatives to nurture competent corporate leaders. Moreover, this understanding is essential for policymakers and organisational stakeholders who seek to advance gender inclusivity and diversity in leadership positions. Within the context of Indonesia, it emphasizes the necessity for structural modifications to tackle the insufficient representation of women in leadership roles.

Nevertheless, this research is prone to numerous limitations. There is a deficiency in the development of organised Indonesian stock market financial report data services, and there are several areas in the regulations concerning company information disclosure that need enhancement. In addition to the attributes that have been analysed, there are other characteristic traits of a Chief Executive Officer that could potentially influence managerial abilities. Regrettably, our analysis was hindered by a lack of adequate data, which impeded us from conducting further examination of additional attributes such as marital status, educational major, political connections, and industry experience.

Acknowledgments
This research is funded by a Department of Business Management Research Grant.

References

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309.

Amore, M.D., Bennedsen, M., Larsen, B., & Rosenbaum, P. (2019). CEO education and corporate environmental footprint*. 94*, 254–273.

Andika, A., Susilo, C. F., & Jennifer. (2022). Educational background analysis of ceos of large Indonesian listed companies. *ELS Journal on Interdisciplinary Studies in Humanities*, *5*(2), 240-254.

Arquisola, M. J., Shella, K., & Hutabarat, E. (2018). How does board diversity affect the financial performance of commercial banks in indonesia? An inquiry. *Jurnal Manajemen*, *22*(1), 62–73.

Baghdadi, G. A., Safiullah, M., & Heyden, M. L. M. (2023). Do gender diverse boards enhance managerial ability?. *Journal of Corporate Finance*, *79*, 102364.

Baik, B., Brockman, P.A., Farber, D.B., & Lee, S. (2018). Managerial ability and the quality of firms' information environment. *Journal of Accounting, Auditing and Finance*, *33*, 506–527.

Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies.

Bhutta A.I., Sheikh M.F, Munir A., Naz A., & Saif I. (2021) Managerial ability and firm performance: Evidence from an emerging market. *Cogent Business & Management*, *8*(1),1879449.

Bjuggren, P. O., Nordström, L., & Palmberg, J. (2018). Are female leaders more efficient in family firms than in non-family firms? *The International Journal of Business in Society*, *18*(2), 185–205.

Buchholtz, A. K., Ribbens, B. A., Houle, I. T. (2003). The role of human capital in postacquisition CEO departure. *Academy of Management Journal*, *46*(4), 506–514.

Byron, K., & Post, C. (2016). Women on boards of directors and corporate social performance: A meta-analysis. *Corporate Governance: An International Review*, *24*, 428–442.

Chen, Yangyang & Podolski, Edward, J., & Veeraraghavan, M. (2015). Does managerial ability facilitate corporate innovative success? *Journal of Empirical Finance*, *34*, 313-326.

Chown, S. M. (1960). A factor analysis of the Wesley Rigidity Inventory: Its relationship to age and nonverbal intelligence. *The Journal of Abnormal and Social Psychology*, *61*(3), 491–494.

Custódio, C., & Metzger, D. (2014). Financial expert CEOs: CEO's work experience and firm's financial policies. *Journal of Financial Economics*, *114*(1), 125–154.

Custódio, C., Ferreira, M. A., & Matos, P. (2013). Generalists versus specialists: Lifetime work experience and chief executive officer pay. *Journal of Financial Economics, 108*, 471-492.

DasGupta, R., & Pathak, R. (2021). Role of educational, regional and religious attributes of CEOs in performance of Indian family firms. *International Journal of Managerial Finance*, *18*(5), 997-1027.

Demerjian, P., Lev, B., McVay, S. (2012). Quantifying managerial ability: A new measure and validity tests. *Management Science*, *58*, 1229–1248.

Demerjian, P.R., Lev, B., Lewis, M.F., & McVay, S.E. (2013). Managerial ability and earnings quality. *Accounting Review*, *88*, 463–498.

Earley, P. C., & Mosakowski, E. (2000). Creating hybrid team cultures: An empirical test of transnational team functioning. *Academy of Management Journal*, *43*(1), 26–49.

Fernando, G. D., Jain, S. S., & Tripathy, A. (2020). This cloud has a silver lining: Gender diversity, managerial ability, and firm performance. *Journal of Business Research*, *117*, 484–496.

Green, C. P., & Homroy, S. (2018). Female directors, board committees and firm performance. *European Economic Review*, *102*, 19–38.

Gujarati, D. N. & Porter, D. C. (2009). *Basic econometrics*. 5th Edition, McGraw Hill Inc., New York.

Hambrick, D. C., & Mason, P. A. (1984) Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, *9*, 193-206.

Harris, G., Karper, T., Stacks, H., Hoffman, D., DeNiro, R., & Cruz, P. (2001). Management accounting. *Journal of Accounting*, *42*(1), 234–245.

Henderson, A. D., Miller, D., & Hambrick, D. C. (2006). How quickly do CEOs become obsolete? Industry dynamism, CEO tenure, and company performance. *Strategic Management Journal*, *27*(5), 447–460.

Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives?. *Journal of Financial Economics*, *108*(3), 822–839.

International Labour Organization. (2020). Leading to success: The business case for women in business and management in Indonesia. *International Labour Organization*, *19*(9), 1-13.

Jadiyappa, N., Jyothi, P., Sireesha, B., & Hickman, L. E. (2019). CEO gender, firm performance and agency costs: Evidence from India. *Journal of Economic Studies*, *46*(2), 482–495.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Finance Economics*, *3*, 305–360.

Johan, S., & Sari, W. R. (2020). The influence of CEO characteristic on banking performance. *Advances in Economics, Business and Management Research*, *151*, 27–30.

Juniarti, & Jie F. (2024). Performance of gender diversity on board of directors: The case of Indonesia. *Journal of Infrastructure, Policy and Development*, *8*(4), 3438.

Kaur, R., & Singh, B. (2018). CEOs' characteristics and firm performance: A study of Indian firms. *Indian Journal of Corporate Governance*, *11*(2), 1–16.

Kim, D., & Starks, L. T. (2016). Gender diversity on corporate boards: Do women contribute unique skills? *American Economic Review*, *106*, 267–271.

King, T., Srivastav, A., & Williams, J. (2016). What's in an education? Implications of CEO education for bank performance. *Journal of Corporate Finance*, *37*, 287–308.

Koester, A., Shevlin, T., & Wangerin, D. (2017). The role of managerial ability in corporate tax avoidance. *Management Science*, *63*, 3285–3310.

Lam, K. C. K., McGuinness, P. B., & Vieito, J. P. (2013). CEO gender, executive compensation and firm performance in Chinese-listed enterprises. *Pacific-Basin Finance Journal*, *21*, 1136–1159.

Lee, C.-C., Wang, C.-W., Chiu, W.-C., & Tien, T.-S. (2018). Managerial ability and corporate investment opportunity. *International Review of Financial Analysis*, *57*, 65–76.

Morresi, O. (2017). How much is CEO education worth to a firm? Evidence from European firms. *PSL Quarterly Review, 70*(282), 311 – 353.

Phan, D. H. B., Tran, V. T., Nguyen, D. T., & Le, A. (2020). The importance of managerial ability on crude oil price uncertainty-firm performance relationship. *Energy Economics*, 88, 104778.

Quoc Trung, N. K. (2022). Board of directors characteristics affect commercial banks' performance – evidence in Vietnam. *Cogent Business & Management*, *9*(1), 1-33.

Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *International Journal of Productivity and Performance Management*, *55*(7), 569-593.

Stevens, J. M., Beyer, J. M., & Trice, H. M. (1978). Assessing personal, role, and organizational predictors of managerial commitment. *The Academy of Management Journal*, *21*(3), 380–396.

Tania, K., & Hesniati, H. (2022). The effect of gender diversity on firm performance in Indonesia. *Jurnal Manajemen Strategi Dan Aplikasi Bisnis*, *5*(2), 267 – 284.

Von den Driesch, T. , Eva Susanne da Costa, M. , Christina Flatten, T. , & Brettel, M. (2015). How CEO experience, personality, and network affect firms' dynamic capabilities. *European Management Journal, Elsevier*, *33*(4), 245-256.

Wardhani, P. (2021). Pengaruh pengungkapan CSR, leverage, likuiditas dan ukuran perusahaan terhadap kinerja keuangan. *Jurnal Manajemen Daya Saing*, *23*(1), 1-12.

Yung, K., & Chen, C. (2018). Managerial ability and firm risk-taking behavior. *Review of Quantitative Finance and Accounting*, *51*, 1005–1032.

Yunlu D. G., & Murphy D. D. (2012). R&D intensity and economic recession: Investigating the moderating role of CEO characteristics. *Journal of Leadership Organizational & Studies, 19*(3), 284–293.

Zhou, M., Chen, F., & Chen, Z. (2021). Can CEO education promote environmental innovation: Evidence from Chinese enterprises. *Journal of Cleaner Production*, *297*(1), 126725.