

# DOES CEOS' GENDER SHAPE CORPORATE SUCCESS? INSIGHTS FROM INDONESIAN FIRMS

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## Abstract

This study examines the impact of CEO gender on corporate performance, measured by Return on Assets (ROA), using a sample of Indonesian firms. While firms led by female CEOs tend to show higher ROA, the effect is not statistically significant, suggesting that gender differences in leadership may be less pronounced in Indonesia's corporate environment. Among control variables, CEOs with postgraduate degrees significantly improve firm performance, highlighting the value of advanced education in leadership. CEO age positively influences ROA, reflecting the importance of experience, while larger board sizes are associated with lower performance, indicating potential inefficiencies in governance. These findings underscore the complex role of gender diversity in leadership in Indonesia, where traditional cultural norms and changing views on women in executive positions may influence corporate outcomes. The study calls for policymakers and firms to promote leadership inclusivity and ensure that governance structures and education investments align with performance goals in Indonesia's evolving economic landscape.

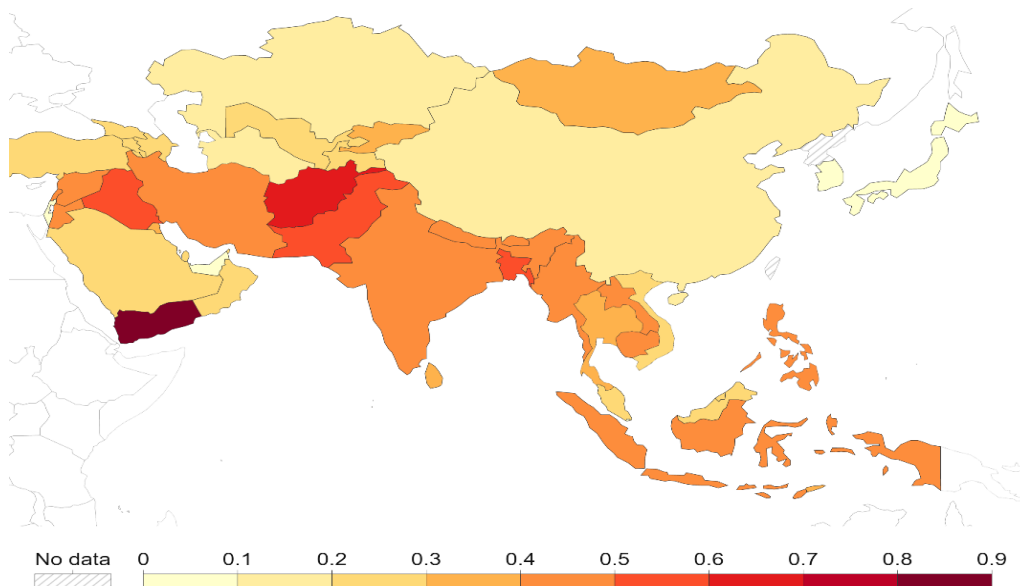
**Keywords:** CEO Gender; Corporate Performance; Return on Assets (ROA); Governance Structure; Indonesian Firms.

**JEL Classification:** G32; G34; M12; J16.

## 1. INTRODUCTION

The issue of gender equality in the workplace has become a global focus due to the persistent injustices faced by both men and women around the world. Despite differing circumstances across countries, gender equality in the workplace affects women in both developed and developing nations. One critical aspect is women's access to career opportunities and leadership positions. Stereotypes that view men as more capable and women as less suited to lead in various fields remain a significant barrier (e.g., Pletzer et al., 2015). These gender biases continue to hinder progress towards true equality, limiting women's career advancements and leadership roles globally.

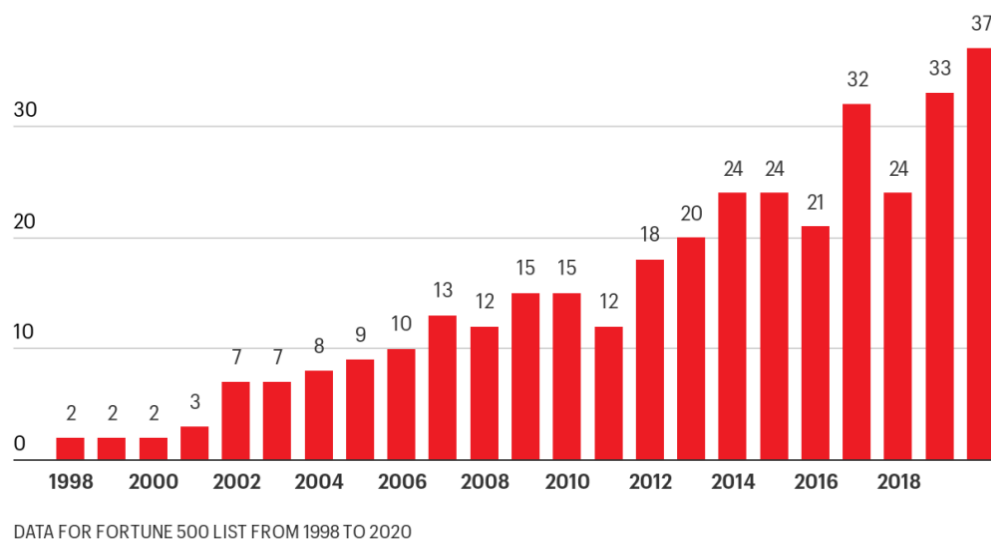
Although Indonesia has adopted gender equality policies and protects women's rights through legislation, the reality on the ground shows that gender equality in the workplace is still far from perfect. As shown in Figure 1.1, Indonesia's Gender Inequality Index (GII) remains high within the Asia region, with scores ranging between 0.4 and 0.5. A high score on this index reflects significant gender inequality in a country. Recent data also highlights that gender equality remains a challenge in Indonesia's business world. Women's participation in leadership positions is still relatively low. According to the 2021 Women in Business survey by Grant Thornton, only 29% of companies in Indonesia have at least one woman in senior management positions, which is below the global average of 31%.



**Figure 1: Gender inequality index (GII) in Asia for 2021**

Sourcer: UNDP, *Human Development Report* (2021-22)

Furthermore, the representation of women in certain industries remains low. Data from Indonesia's Ministry of Industry in 2020 reveals that only around 18% of the workforce in the industrial sector consists of women. This low representation in the industrial sector reflects the overall low participation of women in the country's economy. Figure 1.2 shows the number of female CEOs in Fortune 500 companies from 1988 to 2020.



**Figure 2: The number of female CEOs in Fortune 500**

The influence of CEO gender, as the highest decision-maker in a company, on corporate performance has been a widely discussed research topic in management literature over the past few decades. Several characteristics commonly associated with women may positively impact company performance when a woman holds the CEO position. Psychological studies highlight that women often possess traits such as empathy, collaboration, effective communication, and a focus on building long-term relationships. These characteristics, often linked to transformational leadership styles, can foster a more inclusive and supportive organizational culture. Female CEOs can leverage their empathetic understanding to create a work environment that prioritizes employee well-being and job satisfaction, potentially enhancing productivity and workforce motivation. Furthermore, effective communication and collaboration skills facilitate more coherent and efficient decision-making processes within organizations, promoting the development of a shared vision and alignment with strategic goals.

Research also indicates that women tend to adopt a more cautious approach to risk in decision-making compared to men. While taking risks is essential for business growth, a balanced approach that minimizes unnecessary risks can lead to sustainable performance. Female CEOs bring a prudent and cautious perspective to risk management, ensuring that corporate strategies are carefully calculated and aligned with long-term stability and growth. Ultimately, the combination of these psychological characteristics can shape a work culture where innovation, adaptability, and resilience thrive, which in turn positively impacts corporate performance and enhances the overall success of the organization under female leadership.

Gender equality in the workforce has profound implications for both economic growth and social development. When women have equal access and opportunities to men in the workplace, it creates a widespread effect in fostering innovation, productivity, and economic stability. Women's roles extend beyond physical and intellectual contributions, encompassing leadership and decision-making responsibilities. Therefore, promoting women's involvement at various sectors and organizational levels is a crucial step toward achieving better gender equality. Collaborative efforts from the government, organizations, and society are necessary to create an inclusive and fair work environment where women have equal opportunities to grow and reach their full potential.

Failure to achieve gender equality is not only an ethical issue but can also negatively impact economic performance and long-term sustainability. Balancing gender composition at leadership levels is a crucial strategy for achieving this goal. As a central figure in guiding the direction of a company, the CEO plays a key role in shaping an inclusive organizational culture. Gender-sensitive leadership can transform long-standing norms and values, opening the door for women to play a larger and more influential role in decision-making that shapes the future of the company. It is important to recognize that achieving gender equality is not an easy task. It requires strong commitment and involvement from all sectors of society, including education, organizations, and government institutions. Education that raises awareness about the importance of gender equality and addresses gender stereotypes must be instilled from an early age. Organizations must also adopt policies that support work-life balance to ensure that

women have equal opportunities to reach senior positions in their careers. Government involvement in creating a legal environment that supports gender equality is also crucial, including the formulation and enforcement of laws that protect women's rights in the workplace.

Overall, understanding and addressing gender equality issues is a crucial step toward creating a more just and sustainable society and business environment. Research on the influence of gender on corporate performance in Indonesia is an important step toward gaining a better understanding of this relationship and designing strategic measures to improve existing dynamics.

Gender equality is not only about human rights but also about building a stronger, economically and socially successful society. Studies on gender diversity in companies yield varying results, with some showing a positive relationship between the presence of female executives and company performance (Baghdadi et al., 2023), while others reveal no statistically significant correlation (Pletzer et al., 2015). Therefore, further research is necessary to assess the impact of female CEOs on corporate performance in Indonesia.

The results show that CEO gender does not have a statistically significant effect on corporate performance, as measured by Return on Assets (ROA), with a coefficient of 0.444 (p-value = 0.343). However, CEO postgraduate education is positively associated with ROA, with a significant coefficient of 0.935 (p-value = 0.006), suggesting that advanced education plays an important role in improving firm performance. CEO age also shows a positive impact on ROA, with a coefficient of 0.228 (p-value = 0.003), reflecting the value of experience in leadership. In contrast, larger board sizes are negatively associated with performance, with a coefficient of -0.506 (p-value = 0.045), indicating that excessive governance structures may hinder firm performance. These findings suggest that while CEO gender does not significantly influence corporate performance, other factors such as education, experience, and board size are crucial in determining firm outcomes.

The findings of this study offer both practical and theoretical implications for corporate governance in Indonesia. From a practical perspective, the results highlight the importance of CEO education and experience in driving firm performance, suggesting that companies should prioritize educational qualifications and professional development when selecting leaders. Furthermore, the negative relationship between larger board sizes and performance calls for a re-evaluation of governance structures, with an emphasis on creating leaner, more efficient boards to avoid potential inefficiencies.

Theoretically, this study contributes to the growing body of literature on gender and corporate performance by providing empirical evidence from the Indonesian context, where the influence of CEO gender on performance has been less explored. While the study finds no significant link between CEO gender and firm performance, it adds nuance to the debate, emphasizing the importance of other factors such as CEO education and experience. This research also enriches the discussion on gender equality in leadership, particularly in emerging markets, where traditional gender roles still influence corporate dynamics.

## 2. RELATED LITERATURE

The impact of female CEOs on firm performance has been a subject of extensive research within management literature over the past few decades. In recent years, there has been a growing body of research aimed at understanding the role of gender in the context of corporate performance, particularly in relation to the position of CEO. Studies in this area have yielded diverse results. For example, Mohan and Ruggiero (2011) conducted a study comparing compensation disparities between male and female CEOs.

The findings revealed a gender gap in executive compensation, with women typically receiving lower pay than their male counterparts. This highlights the urgent need to address compensation inequities within the corporate sector. Focusing on the context of the U.S. between 1992 and 2004, Khan and Vieito (2013) examined the differences in performance and risk levels between firms led by female and male CEOs. The study noted that companies led by female CEOs exhibited lower levels of risk, suggesting a tendency for women leaders to avoid risk. However, it is important to note that compensation packages were not effective in mitigating these differences in risk aversion tendencies.

In an international context, Lam et al. (2013) explored the Chinese market from 2000 to 2008. They observed a gradual increase in the presence of female CEOs, particularly in privately controlled Chinese companies, suggesting a potential decline in gender discrimination, possibly influenced by competitive market pressures. However, female CEOs in China were found to receive less favorable compensation packages compared to their male counterparts, creating a contrast with the situation in the United States. Further, Kaur and Singh (2018) conducted a more in-depth study on the characteristics of CEOs and their relationship with firm performance in the Nifty 500 companies.

Their study revealed a positive relationship between CEO compensation and firm performance, emphasizing the importance of aligning compensation with performance metrics. Additionally, they highlighted the impact of CEO nationality on firm performance and its effect on the involvement of foreign directors on corporate boards. In India, Jadyappa et al. (2019) examined the impact of CEO gender on firm performance. Their findings indicated a significant decline in firm performance when the CEO was female, which might be linked to increased agency costs.

Focusing on firm value, Ulah et al. (2020) explored gender diversity and the impact of female CEOs on companies in Pakistan. Their findings show a positive relationship between the presence of female directors and female CEOs with firm value, particularly in non-state-owned companies, emphasizing the importance of gender diversity in corporate governance. Furthermore, Sun and Zou (2021) refined the focus on the complex relationship between the gender gap of CEOs and firm performance, along with political connections in China.

Their findings demonstrate that disruptions in the political connections of female CEOs narrow the gender gap in CEO performance, providing deeper insights into the interplay between gender, political connections, and firm performance. Another study by Yarram and Adapa (2021) found a positive relationship between gender diversity within firms and corporate social

responsibility (CSR), which can enhance the company's reputation and strengthen its relationships with stakeholders. Additionally, this study revealed that companies with female CEOs are more likely to invest in research and development, potentially leading to long-term growth and profitability.

Most studies indicate that women tend to avoid risk more than men. As explained by Huang and Kisgen (2012), companies led by female executives are less likely to engage in mergers and acquisitions or issue debt compared to those led by male executives. Martin et al. (2009) provide evidence that companies with higher risks are more likely to appoint a female CEO to mitigate risk. Elsaid and Ursel (2011), based on data from 679 CEO turnovers in North American companies, conclude that a change in CEO gender—from male to female—reduces company risk. Faccio et al. (2012) document that companies run by female executives have lower leverage, less volatile earnings, and higher survival chances compared to those run by male executives. Differences in risk tolerance are also observed in investment fund management. Niessen and Ruenzi (2006) found that female fund managers tend to invest in more stable assets and trade significantly less compared to their male counterparts.

Adams and Funk (2012) found, contrary to findings for the general population, that female directors are less likely to follow tradition and security-oriented strategies, preferring to take more risks compared to their male counterparts. This suggests that the presence of women in decision-making does not always lead to risk-averse decisions. Studies investigating the relationship between CEO gender and firm performance (e.g., Khan & Vieito, 2013; Peni, 2014) reveal that companies with female executives tend to experience better performance compared to those led by male counterparts. Krishnan and Parsons (2008) found that firms with higher gender diversity in senior management were positively and significantly correlated with higher earnings quality. Furthermore, they discovered that companies with more women in senior management were more profitable and achieved higher stock returns after an IPO compared to those with fewer women in their senior management teams. Erhardt et al. (2003), based on data from 127 large U.S. companies, found evidence that firms with a higher proportion of women on their boards were more profitable compared to the average profitability of their sectors. These studies indicate that gender diversity in leadership may enhance both financial performance and governance outcomes.

In addition, Welbourne et al. (2007), using data from 534 companies listed on the stock exchange for the first time (IPOs), found that the presence of women in top management teams led to better company performance and greater shareholder wealth. Adler (2002), based on Fortune 500 companies, found that firms with a higher number of female executives outperformed the median profitability of their industry. Catalyst, a research and consulting organization studying women and the workplace, examined the profitability of Fortune 500 companies from 1996 to 2000. They found that companies with higher gender diversity outperformed those with lower gender diversity in terms of return on equity and shareholder returns. Furthermore, Smith et al. (2006), using data from 2,500 of the largest companies in Denmark, also found a positive relationship between gender diversity and company performance, measured by several accounting-based performance metrics.



However, they cautioned that the effects are highly correlated with the individual qualifications of female managers. These studies suggest that having a mix of women and men in top management positions leads to better company performance and higher returns to shareholders.

These studies collectively contribute to a deeper understanding of how gender, particularly the gender of the CEO, influences company dynamics and outcomes across various contexts. From the research above, it is evident that gender equality plays a significant role in organizational performance. Several studies in Indonesia have also explored the impact of female directors on company performance.

Darmadi (2013) shows a positive effect between female executives and company performance. Furthermore, Pasaribu (2019) also found that the presence of female directors positively influences company performance in Indonesia. While some of the studies mentioned above show that having a female CEO has a positive impact on company performance, other research indicates that female executives do not significantly affect company outcomes (e.g., Pletzer et al., 2015). Therefore, further research is needed to understand in more detail the mechanisms that influence the relationship between the presence of female CEOs and company performance.

### 3. HYPOTHESIS DEVELOPMENT

Female leadership in the position of CEO can have a positive impact on company performance, based on several factors identified in previous research, as outlined in the works of Khan and Vieito (2013) and Ulah et al. (2020). The study by Khan and Vieito (2013) revealed that companies led by female CEOs show lower risk levels compared to those led by male CEOs. This reduction in risk can lead to greater stability and consistency in decision-making, which could potentially contribute to better long-term company performance.

These findings align with the research of Ulah et al. (2020), which demonstrates that gender diversity, such as the presence of female directors on the company board, positively impacts company value. Female executives bring diverse perspectives and a different decision-making style, fostering a more balanced and comprehensive approach to strategic planning and execution. This, in turn, can contribute to enhanced company performance.

Moreover, Ulah et al. (2020) emphasize that the presence of a female CEO positively enhances company value. This can be attributed to the role of female CEOs in improving corporate governance and reducing agency conflicts. Their presence contributes to a more disciplined management approach, facilitating stronger oversight of operations and strategic initiatives within the company. This study also highlights that the impact of female directors and CEOs on company value is particularly evident in privately owned companies.

This suggests that gender diversity and female leadership can have a significant impact in environments where market forces play a larger role, possibly due to a greater emphasis on effective decision-making and governance in such contexts. Overall, these findings collectively indicate that female representation at the CEO level can positively affect company performance by enhancing risk management, governance, and strategic decision-making processes.

From a psychological perspective, empirical evidence supports the concept that female CEOs possess distinct characteristics that can have a significant impact on company performance. Studies by Eagly et al. (2007) reveal that women often adopt a transformational leadership style characterized by empathy, effective communication, and collaboration. These characteristics foster a more inclusive and supportive work environment, enhancing employee engagement and productivity. Additionally, research by Powell and Butterfield (1994) highlights that women tend to be more cautious about risk in decision-making, which, when balanced with calculated risk-taking, can lead to prudent strategies that contribute to long-term stability and growth. Overall, these psychological attributes position female CEOs to drive organizational success by promoting a culture of innovation, employee well-being, and effective risk management. Based on these arguments and empirical evidence, the researcher formulates the following hypothesis:

**H1:** Female CEOs are hypothesized to be positively correlated with company performance, *ceteris paribus*.

#### 4. DATA AND SAMPLE

This study employs a quantitative method with an associative research approach, aiming to explore and analyze the relationship between CEO gender and corporate performance in the context of corporate finance. To measure the variables involved, the study draws on the latest guidelines and developments in financial literature, particularly in the area of corporate finance. This method allows for statistical data analysis, producing robust and reliable findings that contribute valuable insights into the understanding of gender dynamics in corporate leadership and its impact on company performance.

The research sample consists of companies listed on the Indonesia Stock Exchange (IDX), representing various industrial sectors. The data used in this study are secondary data obtained from the IDX database. The primary focus of data collection is on the main variable, which is the gender of the CEO. The data collection process was carried out manually by reviewing the company's prospectus, annual reports, and official websites to determine whether the CEO is female or male. This variable is then measured using a dummy variable, where 1 indicates a female CEO and 0 indicates a male CEO. This clear and standardized measurement method is expected to yield valid data for further analysis in this study. The structured methodology is essential for handling relevant data and providing a solid foundation for interpreting the research findings.

In addition to the CEO gender variable, this study will also consider other factors that may influence corporate performance. Several factors that could play a significant role in this analysis include company size, ownership structure, and industry sector. The measurement of these variables will be derived from the latest guidelines in financial literature and will be adapted to fit the context of this study. By taking these various factors into account, the research aims to provide a more comprehensive understanding of the impact of CEO gender on corporate performance, while also distinguishing the direct influence of the CEO gender variable from other potentially relevant factors.



In addition to analyzing these variables, this study will also employ advanced statistical analysis techniques to examine deeper and more complex relationships. Regression analysis and proper data processing will help identify whether there is a significant correlation between CEO gender and corporate performance, as well as whether other factors have a meaningful impact on this relationship.

The selection of appropriate analytical techniques is crucial to ensure accurate and reliable research outcomes. The findings from this study are expected to provide valuable insights into the importance of gender diversity at leadership levels within the context of Indonesian business and encourage the adoption of more inclusive policies in organizational structures.

In this study, the author has chosen to apply purposive sampling as the sampling method. This decision is based on the fact that not all potential samples meet the criteria set by the author. Therefore, purposive sampling was selected, with reference to specific considerations or criteria as guidelines for choosing the sample to be used in this research. The following are the criteria used as a reference for sample selection in this study: 1) Domestic banks registered with the Financial Services Authority (OJK), 2) Banks that do not provide annual reports on their company website, 3) Banks that do not include the variables central to this research.

## 5. METHODS

The hypothesis testing in this study will be conducted using an inferential statistical approach, specifically by applying panel data regression analysis. The collected data will be processed and analyzed using STATA software, a widely used statistical tool in economics and finance research. To mitigate the potential impact of outliers in the data, a winsorizing approach will be employed by eliminating the top and bottom 0.5% of the data at each tail of the distribution—a standard method frequently used in finance research. Subsequently, the processed data will be tested using the Hausman test to determine the appropriate regression model: whether the Random-effects or Fixed-effects model is more suitable for the data. Additionally, model robustness will be assessed using the Instrumental Variable Regression method to ensure a strong causal relationship in the regression model, thereby strengthening the empirical evidence generated.

The inferential statistical approach using panel data regression is crucial to understanding how the CEO's gender influences corporate performance, while accounting for other factors that may affect the results. Through the Hausman test and model robustness tests, the study will assess the extent to which the relationship between CEO gender and corporate performance is causal, providing valuable and relevant insights into the role of gender in corporate leadership. This method is expected to provide a strong analytical foundation, resulting in valid findings, and making a significant contribution to a deeper understanding of the impact of CEO gender on company performance. Below is the general panel regression model equation for this study:

$$FIRM\_PERFORMANCE_{i,t} = \beta_0 + \beta_1 CEO\_GENDER_{i,t} + \delta CONTROLS_{i,t} + \varepsilon. \quad (1)$$

The steps related to the analytical techniques in this study are as follows:



**Figure 3: Analysis Technique**

The research framework employs a regression model designed to evaluate the impact of CEO gender on corporate performance (FIRM\_PERFORMANCE), while accounting for control variables (CONTROLS) that may influence this relationship. FIRM\_PERFORMANCE is represented by corporate performance metrics such as Return on Assets (ROA) or Return on Equity (ROE), which serve as the response variables. The primary independent variable in this model is CEO\_GENDER, a dummy variable where a value of 1 indicates a female CEO, and 0 indicates a male CEO. The aim of this study is to quantify the extent to which differences in CEO gender significantly affect corporate performance. The conceptual framework underlying this research is illustrated in the figure below.



**Figure 4: Conceptual Framework**

In addition, the model incorporates control variables (CONTROLS), which include aspects such as company size, ownership structure, leverage, and industry sector. These control variables are included to ensure that the causal analysis between CEO gender and corporate performance is not confounded by additional factors that may influence overall company performance. The coefficient  $\beta_1$  will illustrate the extent to which CEO gender contributes to the variability in corporate performance, and its significance will indicate the statistical influence of this variable on performance outcomes. In this context,  $\beta_0$  serves as the intercept, representing the corporate performance value when all independent variables, including CEO gender and control variables, have a value of zero. This analysis is

expected to provide deep insights into whether CEO gender significantly influences corporate performance, while accounting for relevant control variables. The model serves as an effective tool for exploring the relationship between CEO gender and corporate performance within the context of this research.

## 6. RESULTS

The data analysis was conducted using STATA software, and Table 1 reports the descriptive statistics of the variables included in this study. The dependent variable in this research is Return on Assets (ROA), which measures corporate performance. Meanwhile, the independent variables include Gender Dummy, Age, the Number of Independent Commissioners, and the Education Level (Postgraduate).

**Table 1: Descriptive statistics**

Stats	N	Mean	SD	Min	p25	p50	p75	Max
ROA_Y	400	1.287225	2.6602	-15.89	0.505	1.51	2.265	13.58
GENDER	400	0.7075	0.45548	0	0	1	1	1
AGE	400	56.385	3.151445	48	55	56	58	71
IND_KOM	400	2.6225	0.998743	1	2	3	3	7
POSTGRAD	400	0.515	0.534311	0	0	1	1	3

The data analysis was conducted using STATA software, and Table 2 presents the correlation results among the variables in this study. As observed in the table below, multicollinearity does not pose an issue in the regression model, as the correlation values between variables are low (less than 0.5). In other words, the regression model used in this study can be considered free from multicollinearity problems.

**Table 2: Correlation Output**

	ROA_Y	GENDER	AGE	IND_KOM	POSTGRAD
ROA_Y	<b>1.0000</b>				
GENDER	<b>0.0165</b>	<b>1.0000</b>			
AGE	<b>0.2619</b>	<b>-0.1239</b>	<b>1.0000</b>		
IND_KOM	<b>-0.0645</b>	<b>0.2029</b>	<b>-0.1122</b>	<b>1.0000</b>	
POSTGRAD	<b>0.1768</b>	<b>0.0438</b>	<b>0.0918</b>	<b>-0.0997</b>	<b>1.0000</b>

The regression results (Table 3) indicate that gender does not have a statistically significant effect on firm performance. Nevertheless, the coefficient for the gender variable (0.444) suggests a positive role of women in the company. Control variables such as education, age, and the number of independent commissioners present intriguing findings. Regarding education, it was found that CEOs with at least a Master's degree have a positive and significant impact (p-value of 0.006) on firm performance. This finding aligns with the idea that a higher level of education enhances a CEO's analytical capabilities and decision-making skills, which

subsequently contribute to better firm performance. Furthermore, CEO age also has a positive and significant effect on firm performance, with a p-value of 0.003. Consistent with previous findings, this result suggests that age enhances experience and decision-making ability, thereby positively influencing firm performance. Finally, concerning the number of independent commissioners, the regression results show a negative correlation with firm performance. This finding contradicts the notion that independent commissioners enhance the quality of corporate oversight. Such results may occur due to the insufficient role of independent commissioners in the company, which in turn could negatively impact firm performance.

**Table 3: Regression output**

Fixed-effects (within) regression				Number of obs	=	400
Group variable: ID				Number of groups	=	80
R-squared:				Obs per group:		
Within = 0.0929				min	=	5
Between = 0.0818				avg	=	5.0
Overall = 0.0820				max	=	5
corr(u_i, Xb) = -0.1623				F(4,79)	=	3.59
				Prob > F	=	0.0096
(Std. err. adjusted for 80 clusters in ID)						
ROA_Y	Coefficient	Robust std. err.	t	P> t	[95% conf. interval]	
GENDER	.4441082	.4656372	0.95	0.343	-.4827195	1.370936
POSTGRAD	.9350246	.3295466	2.84	0.006	.2790785	1.590971
AGE	.2282031	.0737972	3.09	0.003	.0813134	.3750928
IND_KOM	-.5061543	.2490583	-2.03	0.045	-1.001892	-.0104162
_cons	-11.04836	3.928131	-2.81	0.006	-18.86711	-3.229611
sigma_u	2.045683					
sigma_e	1.7634773					
rho	.57368163	(fraction of variance due to u_i)				

The findings of this study have significant implications for firms in Indonesia, particularly in the context of corporate governance and leadership development. While gender does not exhibit a statistically significant direct effect on firm performance, the positive coefficient suggests that promoting gender diversity in leadership could still offer qualitative benefits, such as fostering inclusive decision-making and broadening perspectives in strategic planning. For policymakers and firms, this underscores the importance of creating pathways for women to assume leadership roles, as their contributions may enhance organizational resilience and

adaptability in the long term. Moreover, the significant positive effects of CEO education and age highlight the value of investing in leadership development programs that prioritize advanced education and emphasize the accumulation of relevant industry experience. Companies should consider these factors when designing executive recruitment and succession planning strategies to ensure sustained firm performance.

The negative relationship between the number of independent commissioners and firm performance raises questions about the effectiveness of corporate governance practices in Indonesia. This finding suggests a need for firms to evaluate and strengthen the functional roles of independent commissioners, ensuring that they are equipped and empowered to provide meaningful oversight. Regulators and stakeholders may also consider revisiting existing corporate governance frameworks to enhance the accountability and effectiveness of independent boards. Together, these insights encourage Indonesian firms to adopt more holistic approaches to governance and leadership, fostering an environment where diversity, education, and accountability drive sustainable success.

## 7. CONCLUSION

This study investigates the relationship between CEO gender and firm performance among Indonesian companies, alongside the roles of various control variables such as education, age, and the number of independent commissioners. The findings reveal that while gender does not have a statistically significant effect on firm performance, the positive coefficient for the gender variable suggests that female CEOs contribute positively to organizational outcomes. This underscores the potential benefits of increasing gender diversity in leadership positions, even if its direct impact on financial performance is not immediately apparent in this dataset.

The study further highlights the importance of CEO education and age as significant factors influencing firm performance. CEOs with at least a Master's degree demonstrate a positive and statistically significant impact, suggesting that advanced education enhances analytical capabilities and decision-making skills crucial for organizational success.

Similarly, the positive correlation between CEO age and firm performance emphasizes the value of accumulated experience and maturity in navigating complex business challenges. These findings suggest that Indonesian companies should prioritize educational attainment and experience in their leadership development and succession planning strategies.

Interestingly, the study finds a negative relationship between the number of independent commissioners and firm performance. This result challenges the conventional view that independent commissioners enhance corporate governance by improving oversight and accountability. Instead, it points to potential shortcomings in the practical implementation of governance practices in Indonesian firms. These could stem from limitations in the authority, expertise, or engagement of independent commissioners. Therefore, firms and regulators must reassess and strengthen governance frameworks to ensure that independent boards fulfill their intended roles effectively.



In summary, this study contributes to the understanding of leadership and governance dynamics in Indonesia, highlighting the nuanced roles of gender, education, experience, and governance structures in shaping firm performance. While the results do not establish a direct, statistically significant link between CEO gender and firm performance, they advocate for the broader inclusion of women in leadership and the strategic value of education and experience in executive roles. Additionally, the findings call for a critical evaluation of governance practices to optimize the contributions of independent commissioners, ensuring that corporate oversight aligns with organizational goals. Future research could expand on this study by exploring additional dimensions of diversity and governance in different industries and contexts, providing deeper insights into the evolving dynamics of leadership and performance.

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