

## **Women Directors And Audit Fees: The Effect Of Company Performance In Indonesian Publicly Listed Companies**

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### **Abstract**

*This study aims to determine the role of female board directors in influencing audit fees. Furthermore, it also examines the effect of company performance on the influence of female board directors on audit fees. To examine the problem, this study uses upper-echelon theory as a theoretical basis. The sample used in the study was 23 publicly listed mining companies in Indonesia for the 2020-2024 period, comprising both state-owned and private companies, with 115 years of observation data using a purposive sampling method. The research method employed quantitative methods using panel data regression. The research data used were secondary data derived from the companies' annual reports. The results showed that the greater the composition of female directors in a company, a significant positive effect on audit fees (coef = 0.58707; p = 0.078; R<sup>2</sup> = 0.203). Meanwhile, company performance as a moderating variable had no effect on this relationship (coef = -4.82214; p = 0.340; R<sup>2</sup> = 0.230). The results of this study can provide input for both state-owned and private companies, suggesting that women are more conservative and cautious in running their companies.*

**Keywords:** *Public Management Accounting, Auditing, Corporate Governance, Upper-Echelon Theory.*

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## **INTRODUCTION**

Indonesia's economic development is currently moving towards environmentally friendly energy development. In concrete terms, a lithium battery manufacturing plant for electric car batteries was inaugurated recently. Although it is said that this can be an environmentally friendly alternative energy source for motorized vehicles, in reality, the manufacture of these batteries still uses another energy source, namely coal, and this is highly problematic (Triaktiva & Arif, 2024). Government policies related to mining downstreaming have also been carried out; this is in line with strengthening the export value of Indonesia's natural resource commodities as stated in Law No. 3 of 2020 in conjunction with Law No. 4 of 2009 concerning Mineral and Coal Mining (Minerba Law) (Ciptaswara & Sulistiowati, 2022). In addition, the 2023 Job Creation Law supports increasing commodity values. This is also an opportunity to establish new mining companies.

From these two points, it is interesting that companies in the mining sector in Indonesia have the opportunity to maximize their business activities, but on the other hand, their activities are supervised by the government as a regulator, which requires entities to comply with regulations. Not only laws and regulations, but companies must also comply with accounting standards, because currently Indonesia is moving towards green accounting (Amalia et al., 2024). External auditors serve to ensure that the company's financial statements and internal controls are in accordance with applicable standards (Hasibuan et al., 2023). This aims to provide assurance to stakeholders that the entity has complied with existing regulations, so to obtain quality audit results, spending varies depending on the auditor's effort and specialization (Mohapatra et al., 2022). Based on this, the audit fees charged to customers have considered the need to achieve the best quality.

Apart from the auditor's perception, the determination of audit fees also comes from the board of directors (Saggese et al., 2023). The unique characteristics of the board of directors also play a role on the supply side, so that companies can create more efficient audit fees because they can consider several things within the company, meaning the different characteristics between

one company and another will differ. Previous research explains that gender diversity within a board has the potential to increase the effectiveness of the supervisory function (Siska et al., 2025). Related to this, the role of gender diversity in determining audit fees in a company needs to be investigated further. One of the determinants of audit fees is company performance; previous research explains that company performance causes audit fees to increase (Joshi & Al-Bastaki, 2000). However, to date, no research has further investigated the effect of company performance on the relationship between women directors and audit fees, making this very interesting for further study.

Upper Echelons Theory (UET) is used as a basis in the research because it uses certain characteristics of company leaders (Hambrick, 2016), namely the role of women in the company's upper echelons, to determine how the effect of company performance impacts the relationship between women directors and the audit fees paid by the company. This study also uses a sample of public companies in the Indonesian mining sector from 2020 to 2024.

Strategic company decisions, including governance policies and audit practices, are a reflection of the individual characteristics at the top management level. Upper-Echelons Theory states that demographic backgrounds, values, experiences, and personal characteristics of executives influence how they perceive the business environment and make strategic decisions, which ultimately impact organizational outcomes (Hambrick, 2016). In this context, the gender characteristics of directors become one of the important factors that can influence supervisory policies, risk control, and the company's relationship with external auditors. Female directors are generally associated with a higher level of caution (risk aversion), sensitivity to ethical issues, and stronger compliance with financial reporting regulations and standards compared to male directors (Chen et al., 2016). Based on the Upper-Echelons Theory perspective, these characteristic differences influence the strategic preferences of the board of directors in managing risks and ensuring the quality of financial information. The presence of female directors encourages stronger corporate governance practices through improved supervisory functions and an emphasis on financial statement transparency (Abbasi, 2019).

In relation to audit fees, the characteristics of female directors can affect the amount of audit fees through a mechanism of demanding higher audit quality. Female directors tend to demand a more comprehensive audit process to minimize the risk of material misstatement and company reputation risk (Chen et al., 2016). Empirical findings show that companies with higher female representation on the board of directors or audit committee tend to pay higher audit fees as a consequence of increased audit effort and audit quality standards (Abbasi, 2019). This indicates that women strive to reduce existing risks in the company by improving audit quality.

Company performance is one of the important factors that moderates the relationship between female directors and audit fees. Company performance reflects financial stability, economic capability, and the company's risk profile, which are the basis of consideration in audit decision-making (Lassoued et al., 2017). High-performing companies generally have higher reputation expectations and stronger financial capabilities to finance high-quality audits. Conversely, in low-performing companies, pressure for cost efficiency and resource limitations can constrain the directors' ability to improve audit quality, even though the need for supervision actually increases due to high business risks. This condition can weaken the influence of female directors on increasing audit fees or even produce an insignificant relationship (Lassoued et al., 2017).

Based on the Upper-Echelons Theory, the interaction between top management characteristics and organizational conditions is key in explaining variations in strategic corporate decisions (Hambrick, 2016). Thus, the influence of female directors on audit fees is not only determined by gender characteristics themselves, but also by company performance as a contingency factor that moderates the extent to which the values of prudence, ethical orientation,

and quality preferences brought by female directors are translated into audit policies that impact the magnitude of audit fees.

Regarding the characteristics of the board of directors, the interesting element currently is the role of women within the company. Previous research shows that the presence of a board of directors in a company increases company value (Biswas et al., 2025). From this, the role of women makes the company better. Recent research explains that the potential for research regarding the role of female executives in a company is still very large because women possess numerous talents (Elkhwesky et al., 2025). Existing research results indicate that female directors can reduce audit fees charged to the company (Hao et al., 2022). Research in China explains that changing CEOs from male to female reduces audit fees (Gull et al., 2021). Other research shows that the presence of female directors in a company increases audit fees due to risk aversion and the desire for higher quality audits (Alkebsee et al., 2021). In addition, research results on banking companies in Ghana show that the presence of female directors in the company increases audit fees due to the need for audit quality within the company (Luh, 2023). In Indonesia, research results also show that in the banking industry, female directors tend to avoid risks that exist in the company (Setiawan et al., 2023). Related to this, the first hypothesis proposed in this study is:

**H1.** Female directors are positively associated with audit fees in mining companies in Indonesia. Company financial performance is an important factor that can influence auditor risk assessment in the audit process. Previous research stated that company performance does not affect audit fees. (Tat & Murdiawati, 2020). Companies with poor financial performance tend to have a higher bankruptcy risk, which can increase audit risk and ultimately impact the increase in audit fees (Hay et al., 2006). Companies with strong financial performance are often considered to have better internal control systems and a lower risk of misstatement, allowing auditors to reduce complex audit procedures and lower audit fees (Knechel & Salterio, 2016). Conversely, companies experiencing a decline in profits or weakening financial ratios can raise auditor concerns regarding going concern, thus requiring auditors to conduct further testing which implies an increase in audit honorariums (DeFond & Zhang, 2014). Subsequent research also explains that as company performance increases, the ability to pay auditors becomes higher (Swandewi & Badera, 2021)..

Related to previous research, female directors highly require maximum audit quality, so with maximum financial performance, the costs incurred to pay auditors will also be higher. Based on the Upper Echelons Theory (UET), this explains that the better the company's performance, the more female directors desire better audit results by minimizing the risks present in the company they lead. Related to this, the second hypothesis proposed in this study is:

**H2.** Company performance has the effect of strengthening the positive relationship between female directors and audit fees in mining companies in Indonesia.

## RESEARCH METHODS

This study uses a quantitative approach with panel data analysis to determine the relationship between variables over time across various companies (Ahmad et al., 2022). By combining cross-sectional and time-series dimensions, this study provides comprehensive insights. The focus is on publicly listed companies registered on the Indonesia Stock Exchange in the mining sector starting from 2020 (because the Job Creation Law began to be enacted) up to 2024, according to the latest data taken from the annual financial reports of public companies. The samples were selected through purposive sampling using several criteria, which are shown in Table 1. The research variables along with explanations are shown in Table 2, which explains the measurement basis and measurement references for the variables

Table 1. Sample Criteria

No	Criteria	Total Companies
1	Public companies listed on the Indonesia Stock Exchange	951
2	Public companies not in the mining sector	(892)
3	Mining companies	59
4	Companies with incomplete data	(26)
5	Companies having outliers	(10)
6	Research sample companies	23
	Research years 2020-2024	5
7	Total research observations	115

Source: Researcher (2026)

Table 2. Variable Measurement

Variable	Measurement
Audit Fee (Y)	Audit fee disclosed in financial statements using natural logarithm
Female Directors (X)	Percentage of female directors on the board of directors
Financial Performance (Z)	Return on Asset (ROA) ratio = Current income / total assets
Company Age	Calculated from the day of the company's IPO until the observation period
Auditor Size	Uses dummy 1 if the company is audited by the Big 4, 0 otherwise

Source: Researcher (2026)

This study uses several variables in answering the research questions. The dependent variable in this study is audit fees. The independent variable of the research uses the percentage of female directors in a company, while the moderating variable, namely company performance, uses ROA. Control variables use company age and auditor size. In answering the hypotheses, the author conducted several tests, namely: Classical Assumption Test, simultaneous testing (F Test), coefficient of determination test, and partial test. Testing analysis uses STATA, and the empirical models used in this study are:

$$\ln Af_{i,t} = \alpha + \beta_1 WD_{i,t} + \beta_4 AGE_{i,t} + \beta_5 ASIZE_{i,t} + e_{i,t} \dots \dots \dots (1)$$

$$\ln Af_{i,t} = \alpha + \beta_1 WD_{i,t} + \beta_2 ROA_{i,t} + \beta_3 WD * ROA_{i,t} + \beta_4 AGE_{i,t} + \beta_5 ASIZE_{i,t} + e_{i,t} \dots \dots \dots (2)$$

## RESULTS AND DISCUSSION

Table 3 shows a descriptive statistical analysis of the data used in the study processed using the STATA 17 application; from the table, for the audit fee variable which uses the natural logarithm, the average value result shows the figure 20.90892. This value is not much different from the highest and lowest values, meaning that the audit fees between one company and another in the research sample are not significantly different.

**Female Directors** have an average value of 0.139, which indicates that proportionally, the presence of female directors in companies is still relatively low. A standard deviation of 0.178 indicates a variation in gender composition on the board of directors among companies. A minimum value of 0 indicates there are still companies without female directors, while a maximum value of 0.67 indicates ining some companies, the portion of female directors is quite significant. **Company Performance** has an average value of 0.057, which indicates that generally the level of company performance is at a positive but relatively low level. A standard deviation of 0.067 reflects a performance variation that is not too large. A minimum value of -0.098 indicates companies with negative performance, while a maximum value of 0.282 indicates companies with relatively good performance. **Company Age** has an average value of 6,895 days (around 18-19 years), which indicates that most companies in the sample are classified as companies that have been listed on the Indonesian stock exchange for a long time. A fairly large standard deviation (3,089) indicates significant differences in company age. A minimum value of 909 days indicates relatively young companies, while a maximum value of 12,643 days reflects companies that have been operating for a very long time. **Auditor Size** has an average value of 0.4, indicating that about 40% of the companies in the sample are audited by large auditors (e.g., the Big Four), while the rest are audited by non-Big Four auditors. A standard deviation of 0.492 indicates quite a high variation, with a minimum value of 0 and a maximum of 1 according to the characteristics of a dummy variable.

Table 3. Descriptive Statistics

Variable	Mean	Std Dev	Min	Max
Audit Fee	20.908	1.155	18.642	24.32
Female Director	0.1392	0.177	0	0.666
Company Performance	0.0574	0.067	-0.098	0.282
Company Age	6895.4	3088	909	12643
Auditor Size	0.4	0.492	0	1

Source: Researcher (2026)

Table 4 shows the regression results of the effect of Women Directors (WD) on audit fees (LnAf) by including company age (Age) and company size (ASize) as control variables shown in Model 1, then for the moderating variable using the profitability variable (ROA) shown in Model 2. Model 1 test results show Women Directors (WD) have a positive and significant effect at the 10% level (coef = 0.58707; p = 0.078). These results indicate that the presence of women on the board of directors is associated with an increase in company audit fees, so H1 is accepted. The Age variable has a positive and significant effect at the 1% level (coef = 0.00017; p = 0.007), indicating that companies with longer operational ages tend to perform better. ASize also shows a positive and significant effect at the 10% level (coef = 0.41182; p = 0.080), indicating that

large-sized companies have resource advantages that support performance achievement. An R-Square value of 0.2031 indicates that the independent variables are able to explain 20.31% of the variation in company performance. A Prob > Chi<sup>2</sup> value of 0.0005 indicates that the regression model is simultaneously significant.

In Model 2, the results show that female directors still have a positive and significant effect at the 10% level (coef = 0.94734; p = 0.100), even though there is a decrease in significance compared to Model 1. The ROA variable has no significant effect on audit fees (p = 0.943), then the WD\*ROA interaction result is not significant (coef = -4.82214; p = 0.340). These results indicate that company performance has no effect on the influence of female directors on audit fees, so H2 is rejected. For the control variables, namely company age and auditor size, they are still in line with Model 1, which is positive and significant. The R-Square value in Model 2 increased to 0.2300, which indicates an increase in the model's explanatory ability. A Prob > Chi<sup>2</sup> value of 0.0012 confirms that the model is statistically feasible.

Table 4. Regression Results

Dependen Variabel LnAf	Coef	Prob
<b>Model 1</b>		
WD	0.58707	0.078*
Age	0.00017	0.007***
Asize	0.41182	0.080*
R-Square Prob>Chi <sup>2</sup>		0.203 0.0005
Dependen Variabel LnAf	Coef	Prob
<b>Model 2</b>		
WD	0.94734	0.100*
ROA	0.31094	0.943
WD*ROA	-4.82214	0.340
Age	0.00018	0.006***
Asize	0.37015	0.082*
R-Square Prob>Chi <sup>2</sup>		0.2300 0.0012

Source: Researcher (2026)

This result of Model 1 are in line with previous research which explains that the greater the composition of women who are experts in finance on the board of directors, the more audit fees will increase; this is because women desire more complex assurance from external auditors, so they do not mind paying more (Miglani & Ahmed, 2019). Other research shows that female directors prefer maximum audit quality, so female directors do not mind paying more as long as the quality obtained is maximum (Luh, 2023). From the Upper Echelon Theory perspective, these research results explain that women are very attentive and careful in leading companies, so they want the company to remain in accordance with existing procedures.

The results of this study provide empirical support for the Upper Echelon Theory, which emphasizes that top management characteristics influence organizational outcomes through cognitive processes and strategic decision-making. The presence of female directors reflects differences in values, experiences, and leadership styles that have the potential to influence the

quality of strategic corporate decisions. The positive effect of female directors on audit fees shows that gender diversity at the director level plays a role in increasing the effectiveness of supervision and the quality of decision-making. In the upper echelon perspective, female directors bring a more cautious orientation towards risk, higher sensitivity to stakeholders, and a tendency to consider long-term sustainability in the formulation of corporate strategy.

These findings are consistent with recent research showing that gender diversity on the board of directors has a positive impact on audit fees. This shows that female directors pay more to external auditors due to a more cautious nature in making decisions, and external auditors must be able to guarantee that all activities within the company have been in accordance with existing procedures and standards.

In model 2, the insignificance of the ROA variable and the WD\*ROA interaction indicates that the influence of female directors on audit fees disregards company profit or performance. This is in accordance with previous research which explains that there is no influence of company performance on audit fees (Tat & Murdiawati, 2020). This strengthens the Upper Echelon Theory argument that top management characteristics affect performance through long-term strategic processes, which are not always directly reflected in annual accounting performance indicators, so in determining contract values when appointing external auditors, female directors disregard their company's performance, but what matters most is the result they receive from the perfection of the audit conducted. The positive influence of company age indicates that more mature companies have more complex systems and business activities, so audit fees will also increase. Furthermore, auditor size, which has a positive effect, indicates that the world's four largest public accounting firms, commonly called the Big Four, tend to set high rates for companies that want to use their services, which is inseparable from the big name and guarantees offered by the Big Four in their audit activities.

## CONCLUSION

This study aims to determine whether the composition of the female board of directors in a company can influence audit fees. In addition, this study also examines the effect of company performance on the relationship of the female board of directors' composition to audit fees. The results of the research conducted in mining companies that have gone public for the 2020-2024 period show that female directors in the company make audit fees larger. This is because women desire certainty and tend to be more cautious in leading a company.

The panel data regression results from this study show a significance value of 0.078 with a coefficient of 0.58707. Meanwhile, the research findings indicate that company performance has no effect on this relationship, as the significance value of the moderating variable, namely company performance, shows a probability of 0.340. This suggests that if female directors already have a strategic plan and demand excellence, any company conditions will not hinder their goals.

The theoretical implication of this research is to add to the literature for future researchers interested in audit fees and the composition of the female board of directors. Practically, the results of this study show that the presence of female directors will increase audit fees; this is very good for conservative companies, so the more women there are, the more stable the company will be, and for the government, the results of this study can be an input to implement regulations on a minimum composition of women on the board of directors.

The limitation of this study is that the company sample is only in the mining sector; this is because the researcher tried to focus on an industry that is the government's main focus. Future research should expand the sample and include different industries. In addition, audit fees are

still rarely researched; for future research, factors influencing this can be examined, both from the perspective of the company and the Public Accounting Firm

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