

Research Paper

Audit Quality as a Mediator in the Relationship between Capital Structure, Firm Size, and Firm Value

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Abstract

This study examines the moderating effect of audit quality on the relationship between capital structure, firm size, and firm value. This analysis is based on a sample of 70 manufacturing companies listed on the Indonesia Stock Exchange for the 2018–2024 period, resulting in a total of 490 data points. To achieve the research objectives, an explanatory research design was employed. The data analysis involved financial ratio measurement, descriptive evaluation, and inferential statistics, with the latter conducted using Warp Partial Least Squares (WarpPLS). The results indicate that both capital structure and firm size have a significant impact on audit quality. In addition, firm size and audit quality demonstrate a significant influence on firm value, while capital structure does not show a meaningful relationship with firm value. The study also finds that audit quality does not operate as a mediating factor between capital structure, firm size, and firm value. Overall, these results provide empirical evidence supporting both signaling theory and agency theory, highlighting the importance of audit quality in strengthening public trust in firms. High-quality audits contribute to enhancing corporate reputation and sustaining firm value in the long run. While audit quality is influenced by debt policy and firm size, it does not act as a mediating mechanism in the link between capital structure, firm size, and firm value. Stakeholders should select professional and independent auditors to ensure transparency, thereby improving reporting quality and market confidence.

Keywords Capital Structure, Firm Size, Audit Quality, Firm Value

INTRODUCTION

Company value is the company's achievement condition, reflecting public trust in the company. Company value is seen as the maximization of shareholder wealth, which is achieved by maximizing the company's stock price (Brigham & Houston, 2006). The primary objective of the company is to enhance its value. Company value can be increased by improving public trust in the company.

Capital structure policy can significantly impact a company's value. Capital structure policy can prevent managers from prioritizing their personal interests. Creating debt binds managers to the obligation to pay future cash flows (Jensen, 1986). The risk of default on debt obligations may act as a disciplinary mechanism that enhances organizational efficiency. In this context, debt serves to mitigate agency costs and, in turn, contributes to the improvement of firm performance. Tax preference theory posits that debt can also enhance company value, as interest on debt reduces taxable income, thereby lowering corporate taxes and ultimately improving company performance (Modigliani & Miller, 1963). Research on the influence of capital structure on firm value shows varying results. Research findings indicate a significant positive influence of capital structure on firm value, as demonstrated by Indarwanta et al. (2020) and Fatmala and Pertiwi (2025). This differs from the findings of Nguyen and Nguyen (2020), which showed a significant negative impact. Different results were also presented by Suhadak et al. (2020), Christian et al. (2022), and Anisa & Panuntun (2025), who found no significant effect.

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Firm value is also influenced by firm size. The Resource-Based View (Penrose, 2009) posits that firm size is a key indicator of a company's financial strength. The majority of prior literature suggests that larger firms possess more extensive resources, knowledge, and capabilities. Such advantages enable them to establish a stronger competitive position relative to smaller rivals, thereby facilitating the attainment of superior performance outcomes. Firm size will serve as a signal to investors, which will subsequently impact firm value. Study by Afridi et al. (2022) shows that firm size affects firm value, while Bon and Hartoko's (2022) research indicates no effect.

Audit quality affects firm value. Shareholders need to exercise oversight by conducting more rigorous and thorough audits and requiring competent and independent auditors. One method of oversight is through audits, in order to reduce agency problems. Research by Chen et al. (2017), Alfraih (2016), and Nguyen and Nguyen (2024) indicates that high audit quality will reduce agency problems between shareholders and managers in an effort to improve the value relevance of accounting information and increase transparency, thereby making this information a consideration for market participants and investors. Research by Mehran et al. (2022) states the opposite, that audit quality has an insignificant effect on company performance.

Capital structure can affect audit quality. Agency Theory by Jensen and Meckling (1976) posits that Audit Quality can serve as a mechanism to enhance oversight. Companies with a higher proportion of debt will also have a higher risk and may potentially face financial difficulties. A high debt-to-equity ratio is also associated with liquidity and going-concern issues, which will require a longer audit process to obtain accurate financial statements. Study by Almutairi (2013) has found that the level of debt significantly affects audit quality, which differs from Nnadi et al. (2017) finding that shows insignificant.

Firm size affects audit quality. Conducting an audit at a large company will be more complex than at a smaller company. The larger the company, the more detailed the information will be, thus requiring high-quality audits. A qualified auditor is an effort to minimize conflict between the principal and the agent. A study by Chen et al. (2017) research shows that high audit quality will reduce agency problems between shareholders and managers. Meanwhile, Kafabih and Adiwibowo (2017) found that the larger the firm size, the higher the need for quality audits.

Grounded in the preceding discussion, this research aims to analyze the mediating function of audit quality in the association between capital structure, firm size, and firm value, focusing on manufacturing firms listed on the Indonesia Stock Exchange over the 2018–2024 period.

LITERATURE REVIEW

Signaling Theory

Spence (1973) introduced the signaling theory framework, in which signals are implicitly defined and used to explain why individuals might, and in some cases should, show interest in particular information. According to Gaol et al. (2021) signaling theory highlights the process by which informed parties convey signals to those with limited access to information. While Yasar et al. (2020) stated that the main focus of signaling is on the reputation of the signaler. A good company condition will be attractive and send positive signals that will add value to the company in the eyes of investors.

Resources-Based View

The Resource-Based View (Penrose, 2009) posits that firm size reflects the financial strength of an organization. Within the Resource-Based View of the Firm framework, a company's resources and capabilities are considered the primary determinants of its competitive advantage and overall performance, which will ultimately increase the firm value.

Agency theory

Jensen and Meckling (1976) described the agency relationship within the framework of agency theory, conceptualizing the firm as a nexus of contracts between the principals, who provide economic resources, and the agents, who are entrusted with their utilization and control. High-quality audits serve as a monitoring mechanism for agent behavior, thereby reducing agency costs. Moreover, quality audits enhance the credibility of the information disclosed by the firm, making it a critical factor for consideration by market participants and investors, thereby increasing company value.

Capital Structure

Capital structure policy can prevent managers from prioritizing their personal interests. Creating debt binds managers to the obligation to pay future cash flows (Jensen, 1986). Tax preference theory states that debt can also increase company value because interest on debt will reduce taxable income, which will lower corporate taxes and ultimately improve company performance (Modigliani & Miller, 1963).

Audit quality

A quality audit is an audit conducted by competent and independent individuals. Audit quality acts as a mediator by ensuring financial statements are free from misstatements, thereby limiting earnings management, providing investor confidence, and ultimately increasing company value. Larger companies tend to be audited by larger audit firms with greater resources to conduct quality audits. A quality audit will provide stakeholders with accurate and convincing information.

An optimal capital structure relies heavily on reliable and credible information to attract investors. Audit quality increases confidence in financial statements, making investors more willing to invest in companies with better capital structures, which in turn increases company value. Therefore, the proposed hypothesis is as follows:

- H1: Capital structure influences audit quality.
- H2: Firm size influences audit quality.
- H3: Capital structure influences firm value.
- H4: Firm size influences firm value.
- H5: Audit quality influences firm value.
- H6: Audit quality mediates the influence of capital structure on firm value.
- H7: Audit quality mediates the influence of firm size on firm value.

RESEARCH METHOD

Data and sample collection

The population of this study comprises manufacturing firms listed on the Indonesia Stock Exchange during the last seven-year period from 2018 to 2024. The research employs panel data, yielding a total of 490 observations. A purposive sampling technique is applied, whereby samples are selected based on predetermined criteria. The criteria for sample selection are specified as follows:

- 1. Manufacturing companies listed on the Indonesia Stock Exchange.
- 2. Manufacturing companies that have continuously published financial reports during the research period 2018 2024.
- 3. Manufacturing companies that have continuously generated profits during the research period 2018 2024.
- 4. Manufacturing companies that provide the necessary data for this research.

Measurement

The firm value variable is proxied by Earnings Per Share (EPS) and Tobin's Q (Indarwanta et al., 2025; Mollah et al., 2012; Salim & Yadav, 2012; Tifow & Sayilir, 2015).

Earning Per Share (EPS) =
$$\frac{Net \, Income}{Outstanding \, Share} x \, 100\%$$
 (1)

$$Tobin's Q = \frac{Market Value}{Book Value}$$
 (2)

The capital structure variable is proxied by the Total Debt Ratio (Horne & Wachowicz, 2012) and the Debt-to-Equity Ratio (Shyu, 2013; Horne & Wachowicz, 2012)

$$Total\ Debt\ Ratio = \frac{Total\ Debt}{Total\ Ratio} x\ 100\% \tag{3}$$

$$Debt \ Equity \ Ratio = \frac{Total \ Debt}{Total \ Equity} x \ 100\% \tag{4}$$

The firm size variable is proxied by the natural logarithm of total assets (Vithessonthi & Tongurai, 2015; Ariasinta et al., 2024) and the natural logarithm of total sales (Moh'd et al., 1995).

$$Company Size = Ln (Total Assets)$$
 (5)

$$Company Size = Ln (Total Sales)$$
 (6)

Audit quality variables are proxied by the Big 4 dummy variable (DeAngelo, 1981).

$$Auditor Size = Dummy Variable Big 4 (7)$$

Data Analysis

Data analysis in this study was carried out using both descriptive and inferential statistical approaches. Descriptive statistics were employed to summarize and characterize the research variables, whereas inferential statistics were utilized to examine the relationships and effects among the variables under investigation. The analysis was performed using the WarpPLS statistical software.

FINDINGS AND DISCUSSION

Findings

Model Goodness of Fit and Model Quality Index

The model must have a good Goodness of Fit before interpreting the results of the hypothesis assessment. There are 10 (ten) Model Fit and Quality Indices in WarpPLS analysis to measure the

quality of the structural model (Solimun et al., 2017). The feasibility test and quality value of the model and its criteria are presented in Table 1.

Tabel 1. Model Fit and Quality Indices

No	Model Fit and Quality Indices	Fit Criteria	Value	Result
1	Average path coefficient (APC)	p < 0.05	0.094	Good
			P = 0.009	
2	Average R-squared (ARS)	p < 0.05	0.129,	Good
			(P=0.031)	
3	Average adjusted R-squared (AARS)	p < 0.05	0.154,	Good
			(P=0.015)	
4	Average block VIF (AVIF)	acceptable if	1.017	Ideal
		< 5,		
		ideally < 3.3		
5	Average full collinearity VIF (AFVIF)	acceptable if	1.028	Ideal
		< 5,		
		ideally < 3.3		
6	Tenenhaus GoF (GoF)	small > 0.1 ,	0.154	small
		medium		
		> 0.25,		
		large > 0.36		
7	Sympson's paradox ratio (SPR)	acceptable if	1.000	Ideal
		> 0.7,		
		ideally 1		
8	R-squared contribution ratio (RSCR)	acceptable if	1.000	Ideal
		> 0.9,		
		ideally 1		
9	Statistical suppression ratio (SSR)	acceptable if >	1.000	Good
		0.7		
10	Nonlinear bivariate causality direction	acceptable if >	0.600	unacceptable
	ratio (NLBCDR)	0.7		

Sources: Secondary data processed, 2024

In Table 1, out of all the feasibility criteria and quality indices tested, there is 1 (one) model that does not meet the Goodness of Fit, namely the Nonlinear bivariate causality direction ratio (NLBCDR). However, if only one or two indicators of the Model Fit and Quality Indices do not meet, the model can still be used (Solimun et al., 2017).

Hypothesis Testing

Hypothesis testing was employed to assess the statistical significance of the relationships among variables through the evaluation of p-values. When the p-value is below the 0.05 threshold, the relationship between variables is considered statistically significant. The path coefficient estimates and the corresponding hypothesis testing outcomes are reported in Table 2.

Hypothesis	Influence between Variables	Coefficient	p- value	Description				
Direct influence								
1	Capital structure (X1) \rightarrow Audit quality (Z)	0.139	<0.001	Significant				
2	Firm size (X2) \rightarrow Audit quality (Z)	0.135	0.001	Significant				
3	Capital structure (X1) \rightarrow firm value (Y)	0.018	0.344	Not Significant				
4	Firm size (X2) \rightarrow firm value (Y)	0.084	0.030	Significant				
5	Audit quality (Z) \rightarrow firm value (Y)	0.095	0.017	Significant				
	The effect of interaction (Mediating variable)							
6	Capital structure (X1) \rightarrow Audit quality (Z) \rightarrow firm value (Y)	0.013	0.349	Not Significant				
7	Firm size (X1) \rightarrow Audit quality (Z) \rightarrow firm value (Y)	0.013	0.343	Not Significant				

Sources: Secondary data processed, 2024

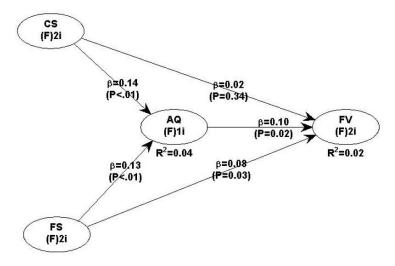


Figure 1. Path Diagram with Hypothesis Testing Results

Discussion

Capital structure has a significant positive effect on audit quality. Agency Theory stated by Jensen and Meckling (1976) the separation of management functions and company ownership has the potential to create agency problems resulting, Audit Quality can be used as a mechanism to assist in oversight, including the oversight of debt financing sources. A high debt ratio is a bad signal in the public's eyes. Therefore, with a high debt ratio, more supervision, diligence, and auditor intensity will be required, thus demanding qualified auditors. This finding is consistent with Almutairi (2013) study.

Firm size has a significant positive effect on audit quality. The larger the company size, the higher the quality of the audit produced. Large companies tend to have more adequate resources, higher complexity, and require more in-depth audits, all of which incentivize auditors to provide better audit quality. Large companies are often subject to closer scrutiny from regulators and investors. This encourages them to maintain standards of corporate governance and audit quality.

The findings from Kafabih and Adiwibowo (2017) found that the larger the company size, the more effective the company must be in designing its control system to improve audit quality.

Capital structure has an insignificant effect on firm value. A positive relationship indicates that a higher debt composition tends to increase company value. Changes in the company's debt and equity composition have no significant impact on the market's valuation of the company. Investors may pay more attention to factors other than capital structure and may not give sufficient consideration to the risk associated with a large proportion of debt when making investment decisions. This finding is not consistent with the previous research conducted by Nguyen and Nguyen (2020), Indarwanta et al. (2020), and Fatmala and Pertiwi (2025), but it does confirm the findings of Suhadak et al. (2020), Christian et al. (2022), and Anisa and Panuntun (2025), which shows that the relationship was not significant.

Firm size has a significant positive effect on firm value. Larger company size can indicate higher stability, economies of scale, and credibility, making it a positive signal for investors. A company's good reputation can increase investor confidence and demand for its stock, ultimately boosting its firm value. In line with the Resource-Based View (Penrose, 2009), which posits that company size is an indicator of a company's financial strength, this information is beneficial for investors.

Audit quality has a significant positive effect on firm value. High audit quality will reduce agency problems between shareholders and managers, ultimately improving company performance (Chen et al., 2017). This finding supports signaling theory (Spence, 1973), which posits that high-quality audits signify good corporate governance, thereby serving as a positive signal to investors and enhancing company value. This finding aligns with research by Chen et al. (2017), Alfraih (2016), and Nguyen and Nguyen (2024), which shows that high audit quality reduces agency problems between shareholders and managers.

Audit quality is not found to mediate the relationship between capital structure, firm size, and firm value. The results demonstrate that audit quality does not serve as an intermediary in explaining the effect of capital structure and firm size on firm value. In this context, audit quality does not function as an explanatory factor in the dynamics of these relationships. Although audit quality independently exerts a significant influence on firm value, it does not alter or moderate the impact of capital structure and firm size on firm value.

The research findings indicate that audit quality does not mediate the effect of capital structure and firm size on firm value, meaning that audit quality does not act as an intermediary explaining the relationship between capital structure and firm size on firm value. Audit quality is not an explanatory factor in the dynamics of the influence between capital structure and firm size on firm value. Although audit quality has a significant direct influence on firm value, it is unable to change or influence how capital structure and firm size affect firm value. Larger and more complex firms can increase operational and financial risks, which can reduce monitoring efficiency and audit quality. The capital structure chosen by a firm can directly affect firm value, independent of audit quality, because large firms have easier access to capital markets and can make more independent financial decisions.

CONCLUSIONS

The manufacturing companies studied indicate that audit quality and firm size have a significant influence on firm value. This suggests that investors are highly concerned about the accuracy of company reporting and trust companies that take their oversight function seriously, as evidenced by high audit quality. The large size of a company is a good signal for investors in making decisions about manufacturing companies going public on the IDX. Signaling theory suggests that shareholders will interpret improved audit quality and the large size of a company as a positive

signal or Good News. Good signals will increase shareholder confidence and expectations, thereby increasing company value.

Capital structure and firm size are key concerns for companies during the monitoring process. A high proportion of debt will improve the quality of the audit when auditing a company. The size of the company is also a key focus of attention in the audit process, as larger companies tend to be more complex, requiring a higher-quality audit. The larger the company, the more effective it needs to be in designing its control system and proving the Agency Theory, which states that audit quality can be used as a mechanism to assist in oversight in order to reduce agency problems.

Audit quality does not mediate the relationship between capital structure and firm size and their impact on firm value. Investors do not consider audit quality a bridge to understanding how capital structure or firm size affects firm value. Although company size and capital structure directly affect company value, the role of audit quality remains.

While not a mediator, audits remain crucial for ensuring the accuracy and transparency of financial reporting. Stakeholders will look for companies with robust reporting systems and sound audit processes. Stakeholders need to analyze the effectiveness of a company's capital structure, as this can directly impact the cost of capital and firm value, without relying on audit quality as an intermediary.

LIMITATIONS & FURTHER RESEARCH

The limitations of this study are that it focuses only on manufacturing companies, so the results cannot be generalized to all companies. Auditor quality proxies only use auditor size. Firm value proxies use Tobin's Q, which presents difficulties in calculating the replacement cost for intangible assets such as research and development (R&D), copyrights, or goodwill.

Further research on audit quality should not only use auditor measures (e.g., Big 4); for example, it could also include proxies for audit fees, audit costs, audit delays, and other relevant factors. Further research could add a firm value proxy using the Price-to-Book (P/B) value, a financial ratio that compares a company's market value to its book value, which is the net value of its assets. Future researchers could expand the research object beyond manufacturing companies. Further research could be conducted on the same topic in other countries with capital markets similar to Indonesia's to assess the consistency of this study's results.

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