



The Influence of Company Growth, CEO Gender, and Profitability on Company Value with Leverage as a Mediating Variable in Telecommunications Sector Companies

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Abstract:

This study analyzes the effects of company growth, CEO gender, and profitability on firm value, with leverage as a mediator, in Indonesian telecommunications firms (IDX, 2015–2024). Using path analysis and Sobel tests, results indicate that growth and profitability (ROA) significantly enhance firm value (PBV), while CEO gender has no impact. Leverage (DER) neither directly affects firm value nor mediates the relationships. Findings suggest that in capital-intensive telecom sectors, debt structure is less influential than profitability and growth in driving market valuation. Practical insights urge managers to prioritize operational efficiency and asset growth, while investors should focus on internal financial metrics.

Keywords: *Company Growth, Ceo Gender, Profitability, Leverage, Company Value, Telecommunications*

1. Introduction

The telecommunications industry plays a strategic role in supporting digital transformation and economic growth in Indonesia. The increasing public need for fast and stable connectivity services has encouraged telecommunication companies to make large investments, such as the development of 5G networks and the expansion of fiber optic infrastructure (Telkom Indonesia, 2022; McKinsey, 2022). However, despite asset growth and operational expansion, the company's market value does not necessarily reflect such improved performance. This suggests that there are other factors that affect a company's value, including capital structure and managerial characteristics (Musthofa et al., 2024; Saksono et al., 2024).

Company growth and profitability are often seen as key internal indicators that affect a company's value. In the perspective of Signaling Theory, high asset growth and profits are seen as positive signals for investors towards the company's future prospects (Spence, 1973; Wahyuningsih & Kartika, 2021). However, not all growth leads to an increase in value if it is not accompanied by efficient financial management (Gunawan & Santoso, 2022). Moreover, the Indonesian telecommunications sector is undergoing rapid technological and competitive transformation. With massive capital investments such as the rollout of 5G and the expansion of fiber optic infrastructure, firms like Telkom Indonesia and XL Axiata are allocating up to 20% of their annual revenues for network development. Despite this growth, company value (as reflected in PBV) is not always aligned with asset expansion, signaling the presence of mediating factors such as capital structure and managerial demographics (APJATEL, 2023).

In addition to performance factors, the demographic characteristics of company leaders, such as the gender of CEOs, are also starting to be considered in strategic management studies. The Upper Echelons Theory explains that the personal characteristics of leaders, including gender, affect decision-making patterns (Hambrick & Mason, 1984). Previous research has shown that female CEOs tend to have a more cautious leadership style in taking risks, including in the use of debt (Faccio et al., 2020; Khan & Vieito,

2021). However, empirical results related to the influence of gender on company value still vary and are influenced by the industry context (Saputra et al., 2023).

Leverage, which is measured through the Debt-to-Equity Ratio (DER), is one of the strategic tools in managing capital structures. The Trade-Off Theory states that the optimal use of debt can increase the value of a company through tax benefits (Modigliani & Miller, 1963). However, excessive use of debt can increase the risk of default and lower investor confidence (Chen & Li, 2022; Savira & Ferdian, 2024). Therefore, this study aims to examine the direct and indirect influence of company growth, CEO gender, and profitability on company value in the Indonesian telecommunications sector with leverage as a mediating variable. By using path analysis and Sobel test on company data listed on the Indonesia Stock Exchange (IDX) in the period 2015–2024

2. Literature Review

2.1 Company Value

A company's value reflects investors' perception of the company's performance and future prospects. One of the most frequently used indicators is the Price to Book Value (PBV) ratio, which measures the ratio between the market value of a stock and the book value of a company (Brigham & Ehrhardt, 2017). High PBV shows market confidence in the company's ability to create added value (Fahmi, 2014; Damodaran, 2019). In this study, firm value is proxied by the Price to Book Value (PBV) ratio. Based on Signaling Theory, PBV can also be viewed as a signal: a high PBV reflects market optimism toward future profitability, while a low PBV may signal underperformance or inefficient asset utilization. Additionally, PBV incorporates investors' perception of risk, growth, and strategic choices. Therefore, firm value becomes the outcome variable that accumulates various managerial, financial, and structural decisions.

2.2 Firm Growth

The company's growth indicates an increase in operational capacity and assets that can give positive signals to investors. According to Signaling Theory (Spence, 1973), stable growth is considered a sign of good prospects. Studies by Wahyuningsih & Kartika (2021) and Metasari & Hikmah (2024) show that company growth has a positive effect on company value. However, different results were found by Musthofa & Bagana (2024), which showed an insignificant influence on the consumption sector. In this research, firm growth is measured using the asset growth ratio, which captures the expansion of operational capacity. According to Penrose (1959), company growth is not merely exogenous but results from internal capabilities and managerial learning. Within Signaling Theory, high asset growth sends a positive message to investors about long-term strategic direction—provided it is accompanied by productivity improvements and sound financing (Gunawan & Santoso, 2022).

2.3 CEO Gender

The Upper Echelons Theory (Hambrick & Mason, 1984) states that the demographic characteristics of CEOs, including gender, can influence strategic decisions and the financial structure of companies. Female CEOs are associated with a more conservative leadership style, especially in the use of debt (Faccio et al., 2020; Khan & Vieito, 2021). However, empirical research shows mixed results; Ramdhania et al. (2020) found a positive influence, while Saputra et al. (2023) found no significant influence on the company's value. The influence of CEO gender can also be understood using the lens of Social Role Theory (Eagly, 1987), which states that societal expectations often shape leadership styles and stakeholder perceptions. In male-dominated industries like telecommunications, the role of gender might be muted due to biases and underrepresentation, even if female CEOs practice sound financial management. Thus, the real impact of gender on firm value could be masked by market stereotypes, justifying its analysis in this study.

2.4 Profitability

Profitability refers to the ability of a company to generate profits from the assets it owns. Return on A

assets (ROA) is often used as a key indicator of profitability. High ROA reflects operational efficiency and can increase investor confidence (Gitman & Zutter, 2015; Brealey et al., 2020). Research by Putri & Sari (2023) and Rezeki et al. (2025) supports that profitability has a positive influence on company value, especially in the telecommunications sector. Return on Assets (ROA), as a profitability proxy, reflects how well a company uses its assets to generate income. The Resource-Based View (Barney, 1991) emphasizes that profitability is an outcome of sustained competitive advantage. High ROA signals managerial efficiency and asset utilization. Furthermore, profitability also influences capital structure decisions, as firms with strong profits often rely less on debt, consistent with Pecking Order Theory (Myers & Majluf, 1984).

2.5 Leverage and the Role of Mediation

Leverage, measured by the Debt-to-Equity Ratio (DER), reflects a company's capital structure and potential financial risks. The Trade-Off Theory states that the use of debt can increase the value of a company to the optimal point (Modigliani & Miller, 1963). However, leverage that is too high can lower the value due to increased risk (Chen & Li, 2022; Savira & Ferdian, 2024). In several studies, leverage was also tested as a mediating variable that bridged the influence between internal performance and company value (Pratama & Wiksuana, 2016; Majumdar & Chhibber, 1999). The role of leverage as a mediator is rooted in the interplay between risk and return. While the Trade-Off Theory supports optimal debt usage for tax efficiency, Pecking Order Theory emphasizes that firms prefer internal funds before external debt. In industries like telecommunications, characterized by high capital intensity and long investment horizons, leverage can send mixed signals—either as a growth enabler or a distress warning—depending on investor interpretation. This complexity justifies its position as a mediating variable in the model.

3. Methodology

3.1 Types and Research Approaches

This study uses a quantitative approach with a type of causal research. The purpose of this approach is to test the cause-and-effect relationship between independent variables (company growth, CEO gender, and profitability), mediating variables (leverage), and dependent variables (company value). This study examines both direct and indirect influences through leverage as a mediating variable.

3.2 Population and Sample

The population in this study is all telecommunication sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2015–2024. The sample selection technique used is purposive sampling, with the following criteria:

1. The company is listed on the IDX for the period 2015–2024.
2. Provide complete annual financial statements during the research period.
3. Have data related to all research variables: PBV, DER, ROA, and CEO gender data.

3.3 Research and Measurement Variables

Table 1: Scale Indicators and Variable Explanations

Variables	Kind	Indicator	Scale	Explanation
Company Growth	Independent	Asset Growth	Ratio	Annual Asset Growth Ratio of the company
CEO Gender	Independent	Dummy (0=male, 1=female)	Nominal	Indicates the gender of the CEO
Profitability	Independent	ROA (Return on Asset)	Ratio	Net profit divided by total assets
Leverage	Mediation	DER (Debt to Equity Ratio)	Ratio	Total debt divided by total equity
Company Values	Depend on	PBV (Price to Book Value)	Ratio	Stock Market Price divided by book value per share

3.4 Types and Data Sources

The data used is secondary data obtained from the company's annual financial reports, the annual report of the Indonesia Stock Exchange (IDX), and other sources of financial data such as the company's official website and public financial applications (Yahoo Finance, Stockbit).

3.5 Data collection techniques

Data was collected through documentation and literature studies. The researcher accesses and downloads the company's annual financial statements from the IDX's official website and the company's official website. Each data is checked for completeness and processed in Microsoft Excel before being statistically analyzed.

3.6 Data Analysis Techniques

Data analysis is carried out through the following stages:

1. Classic Assumption Test

To ensure the validity of the regression model, normality, multicollinearity, heteroscedasticity, and autocorrelation tests were performed.

2. Path Analysis

It is used to determine the direct and indirect influence between variables. This path model allows for a mediated analysis of leverage in the relationship between independent variables to the value of the company.

3. Sobel Test

Used to test the statistical significance of the leverage mediation effect.

4. The analysis was carried out using the help of statistical software SPSS v25

3.7 Research Model

The pathway model used in this study tests:

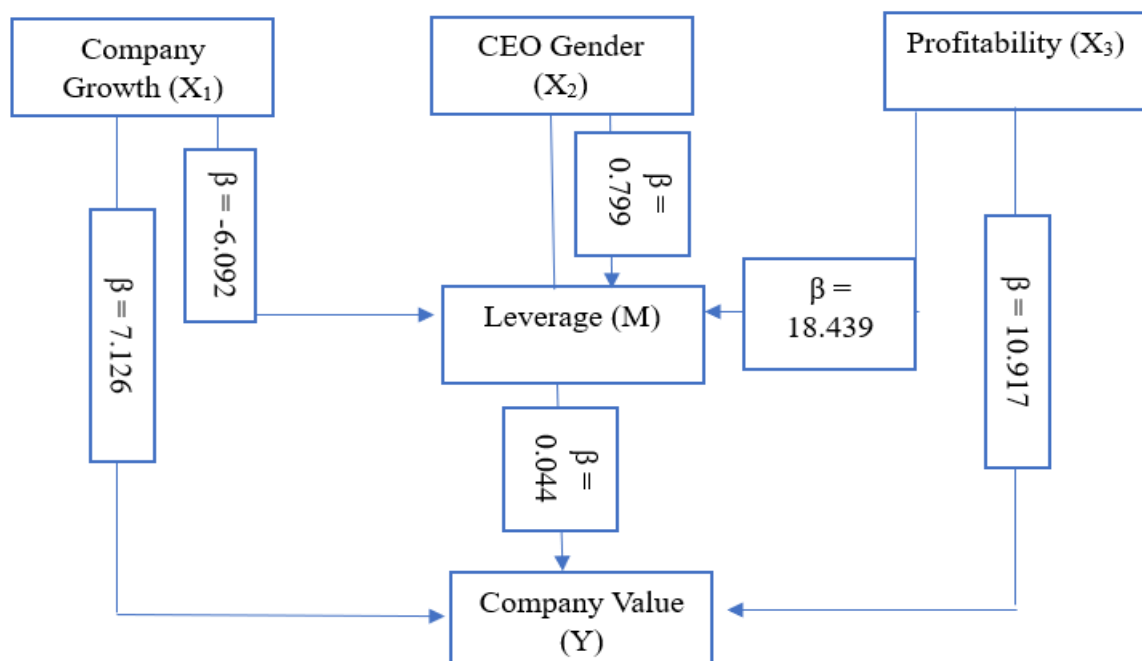
1. Direct influence

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2. Indirect influence

The Influence of Company Growth, CEO Gender, and Profitability through Leverage on Company Value

Figure 1. Research Path Model the Influence of Company Growth, CEO Gender, and Profitability on Company Value through Leverage



4. Results and Discussion

4.1 Results of statistical descriptive analysis

Table 2: Results of Statistical Descriptive Analysis

Variables	Mean	Std. Dev	Min	Max
Asset Growth (%)	8.56	4.32	2.15	15.67
ROA (%)	9.12	2.45	5.01	12.77
DER	1.42	0.63	0.55	2.78
PBV	2.25	0.97	1.05	4.12

Based on the results of the descriptive analysis, the research variables showed a reasonable average value and distribution. The asset growth variable has an average value of 8.56% with a standard deviation of 4.32%, indicating a variation in growth between companies. Profitability (ROA) was recorded at an average of 9.12%, which reflects quite good operational efficiency. Leverage (DER) has an average of 1.42, which indicates a moderate level of debt utilization. Meanwhile, the company value (PBV) shows an average of 2.25, which indicates that the market generally gives a positive assessment of the company in the sample. Then for the CEO Gender variable, it is presented in the form of a dummy variable.

Table 3: Dummy Variable

CEO Gender	Frequency	Percentage (%)
Man	80	88.9%
Woman	10	11.1%
Total	90	100%

Based on the tabulation of data tabulation in table 4.2 on the CEO gender variable from 90 company observations studied, it is known that as many as 80 CEOs (88.9%) are men, and only 10 CEOs (11.1%) are women. This shows that the top leadership positions in the telecommunications company sector during the observation period are still dominated by men.

4.2 Results of Classical Assumption Test Analysis

To ensure that the regression model meets the standard OLS assumptions, several diagnostic tests are performed

1. The Normality test using Kolmogorov–Smirnov showed that the residue was distributed normally ($p > 0.05$).
2. The Multicollinearity test using VIF showed a value of < 10 and a Tolerance > 0.10 , indicating no multicollinearity.
3. The Heteroscedasticity test using the Glejser method produced an insignificant coefficient ($p > 0.05$), indicating homoscedasticity.
4. The Autocorrelation test uses a Durbin-Watson value = 1.96, in the acceptable range (1.5–2.5), indicating no autocorrelation.

4.3 Results of Path Analysis

Based on the analysis of the paths carried out, the following results were obtained:

Table 4: Direct Path Analysis Results

Influence Path	Coeficin Beta	Sig. (p-value)	Information
Company Growth → Company Value	7.126	0.000	Signifikan
CEO Gender → Company Values	-0,146	0.794	Insignificant
Profitability → Company Value	10.917	0.000	Signifikan

Company Growth → Leverage	-6,092	0,325	Insignificant
CEO Gender → Leverage	0,799	0,630	Insignificant
Profitability → Leverage	18,439	0,021	Signifikan
Leverage → Company Value	0.044	0.186	Insignificant

Source: SPSS Output 2025

4.4 Results of mediation tests

To test whether leverage mediates the relationship between independent variables to the company's value, the Sobel test is performed. The results showed that the overall effect of leverage mediation was insignificant.

Table 5: Sobel Test Results

Independent Variables	^a (X → M)	His	^b (M → Y)	Sb	Z-Value	Information
X₁ Growth	-6.092	6.155	0.044	0.033	-0.791	Insignificant
X₂ CEO Gender	0.799	1.653	0.044	0.033	0.450	Insignificant
X₃ Profitability	18.439	7.851	0.044	0.033	1.162	Insignificant

Source: SPSS Output 2025

Based on the results of the Sobel test calculation, it can be seen in table 3 that each mediation path from independent variable (X) to leverage (M), then to the company value (Y), it is known that all Z-Value values are below the statistical threshold of ± 1.96 . The Z values are -0.791 for company growth (X₁), 0.450 for CEO gender (X₂), and 1.162 for profitability (X₃), respectively. Because all three had a significance value of $p > 0.05$, there was no statistically significant effect of mediation. Thus, the debt-based capital structure does not bridge the relationship between these variables in the context of Indonesian telecommunications companies.

4.5 Discussion

4.5.1 The Influence of Company Growth on Company Value

The results showed that company growth had a positive and significant effect on company value ($\beta = 7,126$; $p < 0.01$). These findings are in line with the Signaling Theory (Spence, 1973) which states that asset growth is a positive signal for investors about the prospects for expansion and long-term stability of the company.

In the context of the capital-intensive telecommunications sector, asset growth reflects investments in infrastructure such as 5G networks and fiber optics, which are the competitive basis in the digital age (Chen & Wang, 2020). Studies by Wahyuningsih & Kartika (2021) and Metasari & Hikmah (2024) also support this finding, where asset growth accompanied by increased productivity has a positive impact on market value. However, these results are in contrast to the research of Musthofa & Bagana (2024) in the consumption sector, which found an insignificant effect. This difference may be due to the characteristics of the telecommunications industry that require massive investment, so asset growth is more perceived as a long-term commitment.

4.5.2 The Effect of Profitability on Company Value

Profitability measured through Return on Assets (ROA) was proven to have a positive and significant effect on company value ($\beta = 10,917$; $p < 0.01$). This is consistent with the Resource-Based View (Barney, 1991) which emphasizes that a company's ability to generate profits from its assets reflects a

competitive advantage. The high ROA of companies such as Telkom Indonesia (average ROA of 12%) indicates the efficiency of telecommunication infrastructure management, which is responded positively by the market (Putri & Sari, 2023). These findings also reinforce the study of Almilialia & Herdiningtyas (2020) which stated that high profitability reduces dependence on debt, thereby increasing investor confidence. However, these results differ slightly from Bakhtiar & Rokhayati's (2023) research in the consumption sector, where profitability is not significant. This may be due to high operational costs and competition in the telecommunications sector, so companies with high ROA are considered more able to survive market dynamics.

4.5.3 The Role of Leverage as a Mediation Variable

Leverage proxied through DER had no significant effect on the company's value ($\beta = 0.044$; $p > 0.10$) and failed to mediate the relationship between variables (Sobel test: $Z = -0.791$ to 1.162 ; $p > 0.05$). This result contradicts the Trade-Off Theory (Modigliani & Miller, 1963) which suggests an optimal capital structure. The explanatory points related to the results are

1. Risks of the Telecommunications Industry

The high need for investment and regulatory fluctuations make debt perceived as a risk, not an opportunity (Savira & Ferdian, 2024). For example, PT Centratama Telekomunikasi with a negative DER (-34,954) actually experienced a decrease in PBV.

2. Reliance on Internal Financing

Companies with high profitability such as TLKM (DER 1.105) tend to rely on retained earnings, as per the Pecking Order Theory (Myers & Majluf, 1984).

3. Market Inefficiencies

Indonesian investors may be more focused on operational performance than capital structure, as Pratami & Munashiroh (2024) found.

5. Conclusions and suggestions

This study shows that company growth and profitability have a positive and significant effect on company value in the telecommunications sector in Indonesia, while CEO gender and leverage do not show a significant influence. These findings reinforce the view that internal operational factors, such as asset management efficiency and profits, are the main determinants of a company's value in market perception. Meanwhile, the leveraged capital structure and gender characteristics in leadership have not made a significant contribution to increasing the company's value. Overall, the results of this study confirm that in the context of capital-intensive and high-tech industries such as telecommunications, internal efficiency is prioritized by investors over external or symbolic factors.

Based on these findings, the company's management is advised to prioritize strategies to increase profitability and manage asset growth in a sustainable manner. The use of debt should be done selectively and carefully, considering that leverage has not been proven to increase the value of the company. For investors, fundamental indicators such as ROA and asset growth can be used as the main reference in assessing the company's prospects. The researcher is further expected to expand the scope of sectors and variables to explore the role of mediation or other moderation, including the influence of corporate governance and external risks, in order to gain a more comprehensive understanding of the dynamics of corporate value formation. For the government, there is a need for policies that encourage transparency in the disclosure of capital structure and efficiency-based performance indicators, especially in strategic sectors such as telecommunications. In addition, women's leadership empowerment can continue to be encouraged through more inclusive governance incentives. For future researchers, it is recommended to explore other sectors outside of telecommunications, expand the research period, and consider moderator variables such as corporate governance or risk management in order to gain a more comprehensive understanding of corporate value formation.

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