






“Company value analysis: Sales, assets, growth opportunities and leverage in LQ-45 companies (Indonesia Stock Exchange)”

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COMPANY VALUE ANALYSIS: SALES, ASSETS, GROWTH OPPORTUNITIES AND LEVERAGE IN LQ-45 COMPANIES (INDONESIA STOCK EXCHANGE)

Abstract

Company value plays a significant role in investment decisions, company performance assessment, and risk analysis. In addition, there is uncertainty or inconsistency in the relationship between factors such as sales, assets, and leverage that can affect company value. The study aims to analyze the effect of sales growth, asset growth, and leverage on company value in companies listed on the Indonesia Stock Exchange, especially in the LQ-45 index during the 2021–2022 period. The research method uses a quantitative approach with statistical tools and hypothesis testing. Regression analysis through path analysis models is used to test the proposed hypothesis. The results showed asset growth of 15.42%, debt-equity ratio of 1.7797, and high Price to Book Value (36.2721). Nonetheless, leverage does not act as a mediator in the relationship between asset growth and company value, defying the Modigliani-Miller theory. The finding highlights the complexity of such factors in the context of LQ-45 companies, emphasizing the need for prudent asset management and debt policy to enhance competitiveness. The findings have important implications for financial management and business strategy in a dynamic and competitive environment.

Keywords

sales growth, asset growth, growth opportunities,
leverage, company value

JEL Classification

D22, H83

INTRODUCTION

Capital markets are an integral element in determining company value on the stock exchange, significantly impacting company performance. In this context, evaluating the role and impact of capital market policies on company value and company performance on the stock exchange is important.

Capital market policies promote transparency in corporate financial reporting, allowing investors to make informed investment decisions based on accurate data.

Capital market policies related to sales, assets, and leverage represent how the rules and regulations in the capital market affect these aspects of a company's operations. Sales refer to the revenue generated by a company through the sale of products or services to customers. Capital market policies can affect a company's sales through their effect on market liquidity and investor sentiment. Assets include all company-owned resources, including property, land, inventory, and investments. Capital market policies can affect a company's assets

through investment regulations and minimum capital requirements. Leverage refers to a company's use of debt to increase its capital. Capital market policies can affect a company's leverage through loan terms, credit rules, and interest rates.

To strengthen the competitive position, a company must use debt to increase market power, but using too much debt will cause failure in competition. This failure is because the company cannot optimize production and price against its competitors.

In emerging market studies in the capital market domain, the relationship between sales, assets, and leverage in a company's industry has significant implications for the company's funding strategy and competitiveness. There is a deep need for investors and companies to understand the impact of capital market policies on these key elements to make informed investment decisions and achieve sustainable competitive advantage. While much research has been conducted on the impact of capital structure on company performance and value, research on how these factors impact company competitiveness in a market context still needs to be explored.

Nguyen et al. (2021) found that leverage affects company value in an inverted U-shape. Similar research has not been conducted, particularly exploring the relationship between sales, assets, and leverage on company value. Company value plays an important role in making investment decisions, assessing company performance, and risk analysis. Financial factors such as sales, assets, and leverage can affect company value. Therefore, the problem in this study is that there is still uncertainty or inconsistency regarding sales, assets, and leverage on company value on the Indonesia Stock Exchange.

1. LITERATURE REVIEW AND HYPOTHESES

In the ever-changing and competitive world of capital markets, financial managers face the complex and strategic task of managing a company's assets, sales, and leverage. In addition to making investment decisions that are essential for business growth, financial managers must also carefully consider optimal capital structure policies and dividend arrangements. These decisions form the foundation for companies to improve operations and strengthen their position in the face of intensifying competition in the market. Capital structure, which is the composition of different types of funding such as debt and equity, significantly impacts a company's financial health and the obligations it must fulfil. Capital structure ratios, such as debt to total assets, equity to total assets, and debt to equity, are key in analyzing a company's financial stability and efficiency (Moeinaddin et al., 2013). However, as stated by Myers (1984), there is no one-size-fits-all approach in determining the optimal capital structure, and companies often have to consider various factors when making decisions regarding their funding. One of the most debated topics in contemporary corporate finance

is the philosophy of modern capital structure. In the 1960s, Modigliani and Merton Miller, jointly referred to as MM, were the first to propose the hypothesis. Nonetheless, the theory has been controversial and disputed throughout time, especially in the context of its interaction with elements such as sales, assets, and leverage.

O'Brien's research from 2003, which found discrepancies between MM theory and some empirical data, was responsible for one of the objections raised against MM theory. In response to the criticism, MM changed the basic premises of his theory by considering the impact of taxes associated with corporate earnings. Therefore, MM concluded that using debt can increase business value in situations involving corporate income tax. Since debt interest is considered a cost that lowers the company's tax liability, using debt can provide tax savings and increase the company's value. This is because debt interest is considered a cost that lowers corporate tax liabilities.

In addition, an increase in the level of debt potentially increases risk for shareholders, but it can also result in a higher return on equity, as shown in previous research (Hamouri et al., 2018). This

finding supports Modigliani and Miller's theory, which argues that companies with leverage will be valued higher. Company value has implications for the funding structure through debt (Restianti & Agustina, 2018). In this context, Modigliani and Miller found that the existence of corporate income tax will positively impact company value because debt interest can reduce the amount of tax payments that must be paid. The role of leverage in determining company value is also supported by studies such as those conducted by Bernardin and Tifani (2019) and Wilyaka (2021). However, these findings contradict the results of the study by Sugiharto, Putri, et al. (2021), which concluded that the use of debt reduces company value.

Corporate strategy and decision-making also have a central role in driving company performance, as stated by Akhtar et al. (2022). Management needs to adopt a strategic approach to spur growth and make competitive business decisions. This strategic aspect includes factors such as sales growth, opportunities, and asset growth (Sumantri et al., 2022). In some situations, achieving company growth also requires a significant level of leverage in the form of debt.

Pecking Order Theory, as one of the views in financial decision-making, shows that companies tend to use more internal funds than debt if sales growth increases (Mafridah & Ernandi, 2023). The success of maintaining stable sales growth allows for higher debt levels (Sugiharto et al., 2021). However, the relationship between sales growth and financial leverage is inconsistent (Kartikasari & Merianti, 2016). In this case, the role of creditors can impact the debt-to-equity level (Umar et al., 2021). Asset growth also has an influence on the debt ratio (Handayani, 2021). However, there is a view that asset growth has a negative effect on capital structure (Fauzan et al., 2019). Along with asset growth, debt and reinvestment levels also tend to increase (Munfaqiroh et al., 2023). In this context, research conducted by Fediansyah and Faisal (2020) found a positive relationship between leverage and growth opportunities, while research conducted by Kurniawan et al. (2021) did not find a similar relationship.

Sales growth is considered an indicator of operational success and a predictor of future growth

(Putri & Lusy, 2021). This also has an impact on the assessment of company value (Jao et al., 2020). Companies with promising sales growth potential tend to get higher valuations from investors. Therefore, sales growth has a positive impact on company value (Anggraini & Tanjung, 2020).

In addition to asset and sales growth, considering growth opportunities also has relevance (Lee, 2019). This growth opportunity factor has a direct impact on company value (Wafiyudin et al., 2020), although Joshi's (2018) findings do not always support the same impact. Assets and operational performance also contribute to building investor confidence (Bondarenko et al., 2020). The growth of company assets has an impact on dividend distribution and higher yield levels (Yuniningsih et al., 2019). Growing companies are often an attractive choice for investors (Kiziltoprak & Aksoy, 2018). Asset growth also has a positive correlation with company value, as stated by Yadav et al. (2020).

However, Bernardo and Welch's (2013) study has a different view, which concludes that asset growth has no significant effect on company value. In the context of these uncertainties, as well as complexities related to financial aspects, growth strategies, and the use of leverage in Indonesian companies, further research is considered very important to gain a deeper understanding and clearer implications in a company's efforts to increase company value.

The impact of income on company value is the focus of research that looks at how increasing company value can provide benefits for owners (Mulya, 2019). Company valuation is closely related to the company's performance and its share price, which is influenced by a number of factors in the capital market as well as public perception (Ahmed et al., 2018). One of the main measures used to evaluate a company's financial structure is the leverage ratio, which shows the level of debt relative to equity (Akben-Selcuk, 2016). Sales growth, as another important factor, is of concern to management, investors, and creditors because it can reflect the productivity of the company (Das, 2021). Sales growth has an impact on debt policy (Arhinful & Radmehr, 2023), capital structure (Lehenchuk et al., 2023), and the use of financial leverage (Lindemanis et al., 2022).

Sales growth, growth opportunities and asset growth have a noticeable influence on the level of leverage, with total asset growth showing annual growth (Dwi et al., 2021). However, leverage levels can vary significantly between companies and sectors (Faisal, 2021). Studies of manufacturing companies in Germany show a correlation between asset growth, profitability, and company size and leverage, while in the UK, factors such as asset growth, company size, non-debt tax shelter, profitability, and liquidity also play a role (Anton, 2019). Studies looking at capital structure in different countries consider factors such as asset growth, company size, earnings volatility, and inventory (Kuong, 2021). Asset growth also has a significant impact on capital structure (Clayton & Reisel, 2013) and the use of financial leverage (Ngatemin et al., 2018).

The relationship between growth and leverage is also reflected in the signals received from the market, where companies with a high ratio of market equity compared to book value often indicate growth potential (Bian et al., 2017). Although some capital structure theories suggest that debt can inhibit growth, companies with high growth potential tend to maintain lower debt levels because they are careful in managing the risk of loss reserves (Septyanto & Nugraha, 2021).

This study aims to provide an in-depth understanding of how financial factors (Sales, assets, growth opportunities and leverage) interact and affect firm value in the Indonesian stock market,

with the aim of increasing our understanding of the financial dynamics of companies in the LQ-45 index. Thus, the research hypotheses can be formulated as follows:

H1: Sales growth affects company value.

H2: Asset growth affects company value.

H3: Growth opportunities affect company value.

H4: Leverage affects company value.

H5: Asset growth affects leverage.

H6: Growth opportunities affect leverage.

2. METHOD

This study uses quantitative data collected from LQ-45 companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2022 period (see Table 1).

The source of these data and information comes from the annual financial statements that have been audited by the Indonesia Stock Exchange. The limitations required for the purpose of analysis are used to select the sample. The variables used in this study are leverage, assets, and sales compared to business value. This study uses the path analysis method; before the path analysis is carried out, first look at the description of the research data through descriptive statistical analysis. Descriptive analysis in this study,

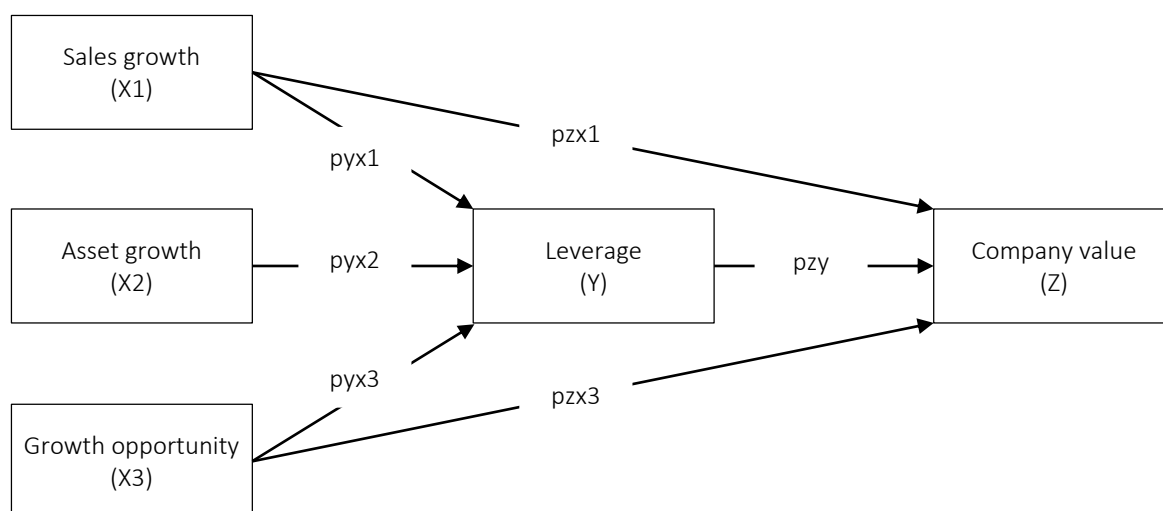


Figure 1. Model path analysis

apart from describing statistical facts about LQ-45 stocks listed on the Indonesia Stock Exchange (IDX) for the 2021–2022 period, is also intended to describe the calculation of indicators for each research variable. Path analysis serves to test the effect of intervening or mediating variables.

Based on the relationship between variables conceptually, the research model framework can be modelled as a path diagram (see Figure 1).

Based on the model in Figure 1, there are two path analysis structural equations, namely:

1) Structural equation 1,

$$Y = \alpha + \rho yx_1 + \rho yx_2 + \rho yx_3 + \varepsilon_1, \quad (1)$$

2) Structural equation 2,

$$Z = \alpha + \rho zx_1 + \rho zx_2 + \rho zx_3 + \rho zy + \varepsilon_2, \quad (2)$$

where α – constant, x_1 – sales growth, x_2 – asset growth, x_3 – growth opportunities, Y – leverage, Z – company value, and ρ – path coefficient (path coefficient).

3. RESULTS AND DISCUSSION

This study uses a two-stage path analysis. First, a direct test of multiple regression analysis was con-

ducted. Second, a Sobel-based path analysis was conducted. Tables 2 and 3 show the results of the multiple regression analysis.

Table 2 shows that Sales Growth (X1) has a significant negative effect on Leverage (Y). Asset Growth (X2) has a significant positive effect of 0.013 on Leverage (Y). The Growth Opportunity variable (X3) has no significant effect on the Leverage variable (Y). The Model Summary table obtained an Adjusted R Square of 0.139, which indicates that Sales Growth (X1), Asset Growth (X2), and Growth Opportunity (X3) together affect Leverage (Y) by 13.9%.

Leverage (Y) decreases Company Value (Z) significantly, as shown in Table 3. With a significance value of 0.832, Sales Growth (X1) positively affects Company Value (Z). Asset Growth (X2) has a positive effect of 0.061 on Company Value (Z). Growth Opportunities (X3) positively affect Company Value (Z) with a significance value of 0.000. In the Model Summary table, the Adjusted R Square of 0.678 shows that Leverage (Y), Sales Growth (X1), Asset Growth (X2), and Growth Opportunity (X3) together contribute 67.8% to Company Value (Z). Figure 2 shows the path analysis diagram for regression analysis.

H1: The significance value (Sig.) X1-Y of 0.832 is greater than 0.05. Therefore, it can be concluded that sales growth does not increase company value.

Table 2. Multiple regression analysis results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.402	.440		3.189	.002
1 Transf.X1	-.048	.117	-.054	-4.08	.685
Transf.X2	.385	.151	.316	2.541	.013
Transf.X3	-.309	.157	-.247	-1.971	.053

Note: a. Dependent Variable: Transf.Y.

Table 3. Results of regression analysis coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1.318	.295		-4.466	.000
1 Transf.Y	-.346	.077	-.339	-4.469	.000
Transf.X1	.016	.073	.017	.213	.832
Transf.X2	.189	.099	.152	1.909	.061
Transf.X3	.918	.101	.717	9.097	.000

Note: a. Dependent Variable: Transf.Z.

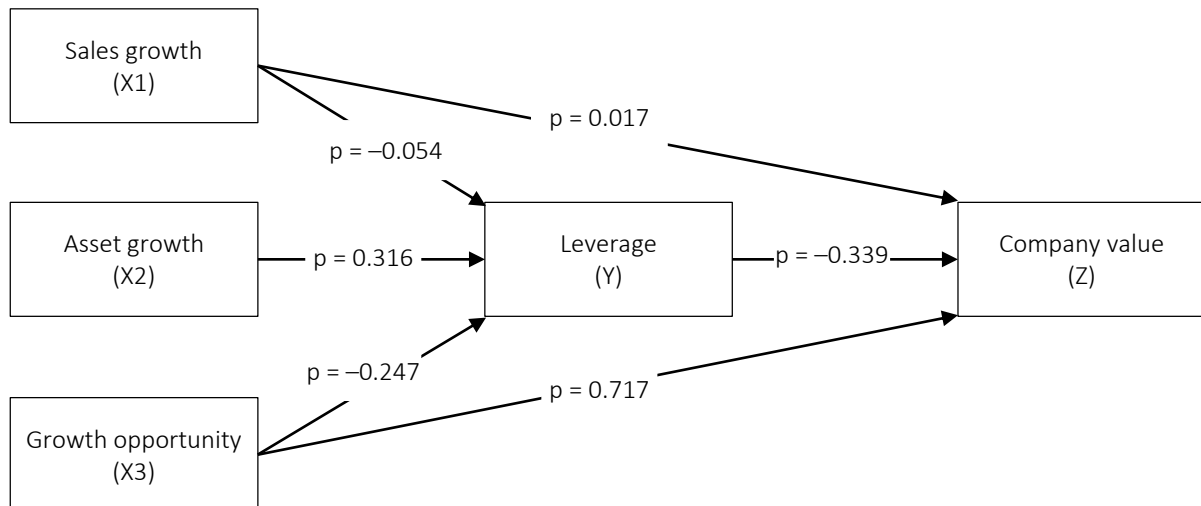


Figure 2. Empirical model of path analysis

H2: The significance value (Sig.) X2 and Y of 0.061 indicate that asset growth does not significantly increase company value., meaning that asset growth does not affect company value.

H3: The significance value (Sig.) X3-Y of 0.000 is less than 0.05 ($0.000 < 0.05$). This shows that growth opportunity increases company value; as a result.

H4: X1 and Z have a significance value (Sig.) of 0.685, greater than 0.05. It can be concluded that leverage has no effect on company sales growth.

H5: The significance value (Sig.) X2 and Y of 0.013 indicate that asset growth increases leverage in the company.

H6: The significance value (Sig.) X3-Y of 0.053 is greater than 0.05. This means that growth has no effect on leverage in IDX LQ-45 companies in 2021–2022.

The Sobel test was conducted to test the mediation hypothesis. The z-coefficient value is calculated to test the indirect effect of the independent variable on the dependent variable. Since the calculated z value is smaller than the absolute z value, it can be concluded that leverage does not mediate the relationship between sales growth and company value. In addition, asset growth affects company value regardless of leverage. The final calculation

shows that leverage cannot mediate the effect of growth opportunity on company value.

During the study period, the sales of LQ-45 companies grew by 11.49%, indicating its sales strategy's effectiveness. The average PBV of LQ-45 during the study period was 36%. The share price of LQ-45 companies during the research period was relatively high because the price-book value (PBV) ratio was above 1.

The results of hypothesis testing show that sales growth has no significant effect on company value. This finding is in line with research conducted (Shin & Groth, 2012). High company value inspires investors, and shareholders can get a high return on investment from the market equity and debt value of the company (Nguyen & Nguyen, 2020). Shares represent the value of a company, and high share prices reflect high value, as expressed by Anton (2016), who also emphasizes that share prices reflect investment, financing, and asset management.

This study measures company value using PBV, which compares stock price to book value. The PBV ratio shows the market's assessment of the company's book value and corporate value creation relative to invested capital (Surbakti & Wijayanti, 2022). A lower PBV ratio generally leads to a lower share price. It is important to note that a company's main goal is to ensure shareholder wealth. Sales growth is influenced by marketing and competition. It can increase company value

and investor confidence. Sales growth contributes to revenue growth, business expansion, and overall company value (Admati et al., 2012).

Although sales growth does not increase company value in this study, it is important to understand that sales growth plays an important role in a company's success. Companies with high growth can compete effectively and gain market share, which in turn can increase overall company value (Narsa et al., 2023).

During the study period, the average asset growth of LQ-45 companies was 15.42%. This indicates an expansion of operations and an increase in assets that can impact operating results. The average PBV ratio of LQ-45 companies during the study period was 36.2721. The higher PBV ratio indicates that the share price of LQ-45 companies is relatively expensive because the price-to-book value (PBV) ratio exceeds 1.

In contrast to the findings of (Jati, 2019), this study found that asset growth has no significant effect on company value. However, according to Salgado et al. (2017), asset growth has a significant effect on PBV and subsequently on company value. Public trust in the company's performance over time contributes to its value. Effective asset management is crucial in determining company value. Every company aims to maximize its value as stakeholder value is essential for long-term sustainability. Public companies seek to increase their value to benefit their owners. Investment, financing, and asset management impact the stock price (Guo & Hawkes, 2019).

PBV is a measure widely used by analysts to predict stock prices, which shows the relationship between the stock market performance of a company and its price to book value ratio. Companies with a high Return on Equity (ROE) often trade at multiples of their book value, thus creating confidence among investors (Prasetya et al., 2021). The PBV ratio can influence investor sentiment and positively impact stock prices.

Asset growth is a metric that compares a company's total assets between different periods. Asset growth contributes to improved company performance, and when assets and operational results

improve, this fosters trust and confidence among external stakeholders (Prasetya et al., 2021). Investors are likely to exhibit a preference for such companies, potentially resulting in an increase in share prices and overall corporate value. However, this study reveals that investors negatively perceive asset growth. This finding suggests that asset growth does not affect company value, and increasing assets without matching operational results leads to a lack of trust among external stakeholders (Apriani et al., 2021).

In the context of LQ-45 companies, growth opportunities in the study period were quite significant, as indicated by the average Price/Earnings Ratio (PER) of 18.5092. High growth indicates an attractive Net Present Value (NPV) investment, while low growth indicates a scarcity of profitable investment projects. The PBV ratio of LQ-45 companies in the study period was relatively high, with an average of 36.2721, which indicates that the share prices of these companies were relatively high compared to their book value (Garin et al., 2023).

The findings of this study support the notion that growth opportunities impact company value, in line with previous research (Utami, 2020). Investors assess company value based on stock prices, and investment decisions contribute to overall company value (Susanti et al., 2022). Therefore, growth prospects are important in attracting investors and driving company value.

High-growth companies require large financial resources. Creditors, investors, and employees are often attracted to companies with high growth potential, as increased productivity contributes to the company's overall growth. High-growing companies may rely more on debt financing to support growth, as it is often cheaper than issuing additional equity (Harsanti & Mulyani, 2021).

However, taking on debt exposes companies and managers to financial risks. Managers can avoid projects with low NPV and prioritize high-growth investments to prevent underinvestment. This strategy allows the company to utilize its resources effectively and avoid missed opportunities (Nwuba et al., 2020).

Growth opportunities and financial management decisions influence a company's capital structure. Growth opportunities can improve a company's capital structure, allowing management to utilize excess free cash flow. Investors generally view debt favorably because it allows companies to optimize their capital structure and increase shareholder value (Hamshari et al., 2020).

During the study period, LQ-45 companies had an average Debt-to-Equity Ratio (DER) of 1.7797, which indicates a significant dependence on debt financing. The high PBV ratio observed during the study period indicates that the share price of LQ-45 companies is relatively high because the PBV ratio exceeds 1 (Ravindran & Kengatharan, 2021).

The level of leverage of a company has a significant impact on its value. Several studies (Lugo, 2020; Okpara et al., 2022; Shrestha et al., 2022) have shown the effect of leverage on company value. Shareholders want an increase in company value and a share price increase, as it directly benefits them (Kiziltoprak & Aksoy, 2018).

Companies use internal and external sources to raise funds, including retained earnings, depreciation, debt, securities, issuance of new shares, purchase discounts, and funding from suppliers and creditors. Trade-off theory states that increased debt financing exposes the company to financial risk due to fixed interest payments, thus impacting net income under uncertain conditions (Senani et al., 2022).

Sales growth is an important factor in predicting company performance. It reflects the company's demand and competition (Migliaccio & Tucci, 2020). Maintaining and increasing sales contributes to profitability and investor attractiveness, which has the potential to have a positive effect on stock prices. However, sales growth did not have a significant effect in this study according to the hypothesis test. Companies with high debt can lower corporate taxes and boost stock prices in accordance with the trade-off theory (Anggraini & Tanjung, 2020).

As observed in LQ-45 companies during the study period, asset growth indicates operational expansion and increased assets. Assets play an im-

portant role in improving company operations. However, this study's relationship between asset growth and leverage is not significant. This finding contradicts some previous studies' expectations (Jao et al., 2020).

A company's capital structure is influenced by various factors, including sales stability, asset structure, growth rate, profitability, tax, control, management attitude, operating leverage, lender and company credibility, market conditions, and internal conditions. Financial managers aim to balance these factors to determine the optimal capital structure that maximizes company value and minimizes funding costs (Munfaqiroh, S. et al., 2023).

Growth opportunities may not directly impact leverage due to the availability of internal funding sources and the potential benefits of external funding. The lack of observed relationship between growth opportunities and leverage in LQ-45 companies can be attributed to the influence of other factors or internal funding limitations alone (Fauzan et al., 2019).

The findings of this study highlight the complex relationship between growth opportunities, asset growth, leverage, and company value. When determining company value, investors consider various factors, including stock price, growth prospects, and capital structure. High-growth companies often rely on debt financing to support their expansion, but managers should carefully weigh the risks and benefits associated with debt and equity financing to optimize company value.

3.1. Analyzing the role of leverage as a mediator between asset growth and company value

During the research period covering a specific time span, the performance analysis of LQ-45 companies showed an average asset growth of 15.42%. The percentage change in assets from the previous year indicates the expansion of operational assets, which is expected to contribute to the improvement of operational performance. In addition, during this period, LQ-45 companies showed an average debt-to-equity ratio of 1.7797, which signifies the proportion of capital used to fulfil their

financial obligations. A higher debt-to-equity ratio indicates a greater capacity to fulfil debt obligations, indicating a stronger financial position for these companies. In addition, the average price-to-book value (PBV) of LQ-45 companies during the study period reached 36.2721. This large PBV value indicates that the share prices of these companies are considered expensive compared to their book value, exceeding the set threshold of 1.

Hypothesis testing in this study aims to determine whether leverage plays a role in mediating the relationship between asset growth and company value in LQ-45 companies. Surprisingly, the results of this analysis show that leverage does not act as a mediator in this context. Moreover, further examination reveals an important observation – as the average debt-to-equity ratio increases (as depicted in Figure 3), interest expense also shows an increasing trend. This finding suggests that debt favors lenders more than shareholders, thus highlighting the potential impact of debt-related financial decisions on stakeholders in LQ-45 companies.

The results of this study contradict the theory of debt value proposed by Modigliani and Miller, which states that leverage increases company value. Instead, this finding suggests that for LQ-45 companies, leverage alone may not be a determining factor in driving company value, as the financial benefits of debt tend to favor lenders over shareholders.

This study has significant practical implications for financial management in LQ-45 companies and can inform decision making regarding the use of leverage and its impact on overall company value. Understanding the relationship between asset growth, leverage, and company value is crucial for these companies to optimize their financial structure and improve their competitiveness in the market.

The large asset growth observed over the study period underscores the importance of managing operational assets efficiently and effectively. The growth of operational assets can significantly impact a company's overall financial performance and position. Financial managers and executives should carefully analyze and formulate asset man-

agement strategies to capitalize on the potential operational performance improvements resulting from asset growth.

In addition, the observed correlation between debt-to-equity ratio and interest expense warrants careful financial decision-making regarding debt financing. While a higher debt-to-equity ratio may provide advantages in meeting debt obligations, it also incurs higher interest expenses, which may affect overall financial stability. Financial managers should strike a balance between debt and equity financing, considering the interests of lenders and shareholders, to optimize the financial structure and achieve sustainable growth.

3.2. Analyzing the role of leverage as a mediator between growth opportunities and company value

During the study period, a comprehensive analysis of the LQ-45 companies revealed that their growth opportunities, measured by the Price/Earnings ratio (PER), averaged 18.5092. This large PER value signaled significant growth prospects for these companies, indicating investment projects with high Net Present Value (NPV). In contrast, lower growth companies in the LQ-45 index were found to have fewer profitable investment projects with positive NPV. This finding underlines the important role of growth opportunities in shaping company outlook and market perception.

Throughout the study period, the average Debt-to-Equity Ratio (DER) of LQ-45 companies stood at 1.7797. This metric indicates the financial structure and funding decisions of these companies. The DER value indicates these companies' efficient use of capital to fulfil all financial obligations, which shows their ability to manage debt and equity financing effectively.

The study further found that the price-to-book value (PBV) of LQ-45 companies averaged 36.2721 during the study period. This significant PBV value highlights the perception of a higher share price than its book value. A PBV ratio above 1 indicates that the stock is trading at a premium to its book value, signaling market optimism and higher investor expectations of future growth and profitability.

The hypothesis testing conducted in this study aims to explore the potential mediating role of leverage between growth opportunities and company value in LQ-45 companies. Surprisingly, the results show that leverage does not act as a mediator in this context. Instead, it appears that growth opportunities directly affect leverage, while leverage, in turn, has no significant impact on company value. As

the average DER tends to increase, followed by an increase in interest expense (as depicted in Figure 3), this suggests that lenders benefit more from the debt of LQ-45 company compared to shareholders. This finding suggests that leverage alone cannot be the determining factor in driving company value for these companies, challenging the debt theory of value proposed by Modigliani and Miller.

CONCLUSION

The present study aims to analyze the effect of sales growth, asset growth, and leverage on company value in companies listed on the Indonesia Stock Exchange, especially in the LQ-45 index during the 2021–2022 period.

The regression test results show that Sales Growth, Asset Growth, and Growth Opportunity together affect Leverage by 13.9%. While the Leverage, Sales Growth, Asset Growth, and Growth Opportunity factors together contribute 67.8% to Firm Value. Sobel test results show that leverage does not mediate the relationship between sales growth and firm value. In addition, asset growth affects firm value without regard to leverage. The last calculation result shows that leverage cannot mediate the effect of growth opportunity on firm value. The results of hypothesis testing show that sales growth has no significant effect on firm value. This finding is in line with research conducted (Shin & Groth, 2012). In contrast, growth opportunity directly affects leverage, while leverage has no significant impact on firm value. Since the average DER tends to increase, followed by an increase in interest expense, so leverage alone cannot be a determining factor in increasing firm value and this challenges the theory of debt value proposed by Modigliani and Miller.

AUTHOR CONTRIBUTIONS

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REFERENCES

1. Abu Hassan, M. F. A., Abdull Rahman, N. L., & Badri Shah, N. S. (2022). Financial Performance Analysis of Transportation Industry Pre and During Covid 19 Pandemic: A Profitability Approach. *Jurnal Intelek*, 17(2). <https://doi.org/10.24191/ji.v17i2.18193>
2. Admati, A. R., DeMarzo, P. M., Hellwig, M. F., & Pfleiderer, P. C. (2012). Debt Overhang and Capital Regulation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2031204>
3. Ahmed, F., Awais, I., & Kashif, M. (2018). Financial Leverage and Companies' Performance: Empirical Investigation of KSE-100 Index. *ETIKONOMI*, 17(1). <https://doi.org/10.15408/etk.v17i1.6102>
4. Akben-Selcuk, E. (2016). Factors affecting company competitiveness: Evidence from an emerging market. *International Journal of Financial Studies*, 4(2). <https://doi.org/10.3390/ijfs4020009>
5. Akhtar, M., Yusheng, K., Haris, M., Ain, Q. U., & Javaid, H. M. (2022). Impact of financial leverage on sustainable growth, market performance, and profitability. *Economic Change and Restructuring*, 55(2). <https://doi.org/10.1007/s10644-021-09321-z>
6. Anggraini, D., & Tanjung, P. R. S. (2020). Company value: Disclosure implications of sustainable supply chain, profitability and industrial profile. *International Journal of Supply Chain Management*, 9(2). <https://doi.org/10.59160/ijscm.v9i2.4671>
7. Anton, S. G. (2016). The Impact of Leverage on Company Growth. Empirical Evidence from Romanian Listed Companies. *Review of Economic and Business Studies*, 9(2). <https://doi.org/10.1515/rebs-2016-0039>
8. Anton, S. G. (2019). Leverage and company growth: an empirical investigation of gazelles from emerging Europe. *International Entrepreneurship and Management Journal*, 15(1). <https://doi.org/10.1007/s11365-018-0524-5>
9. Apriani, N., Putri, T. E., & Umiyati, I. (2021). The Effect Of Tax Avoidation, Exchange Rate, Profitability, Leverage, Tunneling Incentive And Intangible Assets On The Decision To Transfer Pricing. *JASS (Journal of Accounting for Sustainable Society)*, 2(02). <https://doi.org/10.35310/jass.v2i02.672>
10. Arhinful, R., & Radmehr, M. (2023). The effect of financial leverage on financial performance: evidence from non-financial institutions listed on the Tokyo stock market. *Journal of Capital Markets Studies*, 7(1), 53–71. <https://doi.org/10.1108/jcms-10-2022-0038>
11. Bernardin, D. E. Y., & Tifani, T. (2019). Financial distress predicted by cash flow and leverage with capital intensity as moderating. *Jurnal Apresiasi Ekonomi*, 7(1). <https://doi.org/10.31846/jae.v7i1.188>
12. Bernardo, A. E., & Welch, I. (2013). Leverage and preemptive selling of financial institutions. *Journal of Financial Intermediation*, 22(2). <https://doi.org/10.1016/j.jfi.2012.09.004>
13. Bian, J., He, Z., Shue, K., & Zhou, H. (2017). Leverage-Induced Fire Sales and Stock Market Crashes. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3047460>
14. Bondarenko, T., Prodanova, N., Borodin, A., Kokorev, A., & Kairbekuly, A. (2020). The role of non-financial reporting in corporate sustainability of pharmaceutical industry. *Systematic Reviews in Pharmacy*, 11(12). <https://doi.org/10.31838/srp.2020.12.223>
15. Clayton, M. J., & Reisel, N. (2013). Value creation from asset sales: New evidence from bond and stock markets. *Journal of Corporate Finance*, 22(1). <https://doi.org/10.1016/j.jcorpfin.2013.03.002>
16. Das, S. (2021). The Effect of Leverage on Asset Sales between Financial Institutions. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3053198>
17. Dwi Dewianawati, & Erry Setiawan. (2021). An Analysis of Tax Avoidance in Food Beverage Companies Registered in Indonesia Stock Exchange. *International Journal of Science, Technology & Management*, 2(1). <https://doi.org/10.46729/ijstm.v2i1.143>
18. Edison, A., & Nugroho, A. P. A. (2020). The Effect of Leverage And Sales Growth On Earning Management. *Journal of Archaeology of Egypt/Egyptology*, 17(4). Retrieved from <https://archives.palarch.nl/index.php/jae/article/view/4161>
19. Faisal, M. (2021). *Impact of Leverage and Corporate Governance on Earning Management: Empirical Evidence from the Manufacturing Sector of Pakistan*. Capital University of Science and Technology.
20. Fauzan, F., Ayu, D. A., & Nurharjanti, N. N. (2019). The Effect of Audit Committee, Leverage, Return on Assets, Company Size, and Sales Growth on Tax Avoidance. *Riset Akuntansi Dan Keuangan Indonesia*, 4(3). <https://doi.org/10.23917/reaksi.v4i3.9338>
21. Fediansyah, moch. adam, & Faisal, F. A. (2020). Factors Of Company Value: Studies Based On Intellectual Capital, Growth And Company Performance. *Jurnal Akuntansi*, 30(4). <https://doi.org/10.24843/EJA.2020.v30.i04.p09>
22. Garin Pratiwi Solihati. (2023). The effect of leverage, return on assets, company size and sales growth on company value. *EPRA International Journal of Multidisciplinary Research (IJMR)*. <https://doi.org/10.36713/epra12314>
23. Guo, Y., & Hawkes, A. (2019). Asset stranding in natural gas export facilities: An agent-based simulation. *Energy Policy*, 132. <https://doi.org/10.1016/j.enpol.2019.05.002>
24. Hamouri, B., Al-Rdaydeh, M., & Ghazalat, A. (2018). Effect of financial leverage on company growth: Empirical evidence from listed companies in Amman stock exchange. *Investment Management and Financial Innovations*, 15(2). [https://doi.org/10.21511/imfi.15\(2\).2018.14](https://doi.org/10.21511/imfi.15(2).2018.14)

25. Hamshari, Y. M., Alqam, M. A., & Yousef Ali, H. (2020). Impact of leverage: the risks to the listed industrial joint stock companies in Jordan stock exchange. *Academy of Strategic Management Journal*, 19(4). Retrieved from <https://www.abacademies.org/articles/impact-of-leverage-the-risks-to-the-listed-industrial-joint-stock-companies-in-jordan-stock-exchange-9543.html>
26. Handayani, R. (2021). The Effect of Company Characteristics and Sales Growth on Sustainability Report. *Journal of Scientific Research and Reports*. <https://doi.org/10.9734/jsrr/2021/v27i1230473>
27. Harsanti, P., & Mulyani, U. R. (2021). Testing of Fraudulent Financial Statements With the Beneish M-Score Model for Manufacturing Companies Listed in the Indonesian Stock Exchange. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v5i7.9328>
28. Jao, R., Hamzah, D., Laba, A. R., & Mediaty. (2020). Investor decision in estimating the effect of earning persistence, financial leverage, foreign ownership toward company reputation and company value. *International Journal of Financial Research*, 11(4). <https://doi.org/10.5430/ijfr.v11n4p453>
29. Jati, W. (2019). The Effect of Financial Leverage, Operating Leverage and Current Ratio on Profitability at PT. Manunggal Persada Jakarta. *PINISI Discretion Review*, 3(2), 135. <https://doi.org/10.26858/pdr.v3i2.13259>
30. Joshi, H. (2018). Corporate Risk Management, Companies' Characteristics and Capital Structure: Evidence from Bombay Stock Exchange (BSE) Sensex Companies. *Vision*, 22(4). <https://doi.org/10.1177/0972262918803172>
31. Kartikasari, D., & Merianti, M. (2016). The effect of leverage and company size to profitability of public manufacturing companies in Indonesia. *International Journal of Economics and Financial Issues*, 6(2). Retrieved from <https://www.econjournals.com/index.php/ijefi/article/view/1763>
32. Kiziltoprak, S., & Aksoy, M. (2018). The Analyses of Financial Performance of Family Businesses Traded in Borsa Istanbul. *EGE ACADEMIC REVIEW*, 18(1). Retrieved from <https://dergipark.org.tr/en/pub/eab/issue/39984/475243>
33. Kuong, J. C. F. (2021). Self-Fulfilling fire sales: Fragility of collateralized short-term debt markets. *Review of Financial Studies*, 34(6). <https://doi.org/10.1093/rfs/hhaa115>
34. Kurniawan, A., Bisri, & Putra, D. B. (2021). Effect of Profitability and Working Capital on Company Value on Food and Beverage. *Journal of Industrial Engineering & Management Research*, 2(2). <https://doi.org/10.7777/jiemr>
35. Lee, K. J. (2019). The effects of social responsibility on company value: a real options perspective of Taiwan companies. *Economic Research-Ekonomska Istrazivanja*, 32(1). <https://doi.org/10.1080/1331677X.2019.1679213>
36. Lehenchuk, S., Chyzhevska, L., Meluchova, J., Zdyrko, N., & Voskalo, V. (2023). Determinants of agricultural companies' financial performance: The experience of Poland, Slovakia and Ukraine. *Investment Management and Financial Innovations*, 20(1). [https://doi.org/10.21511/imfi.20\(1\).2023.10](https://doi.org/10.21511/imfi.20(1).2023.10)
37. Lindemanis, M., Loze, A., & Pajuste, A. (2022). The effect of domestic to foreign ownership change on company performance in Europe. *International Review of Financial Analysis*, 81. <https://doi.org/10.1016/j.irfa.2019.04.004>
38. Lugo, S. (2020). The Value of Corporate Bond Restrictive Covenants during the COVID-19 Crisis. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3624898>
39. Mafridah, S. D., & Ernandi, H. (2023). Fixed Asset Intensity, Leverage, Company Size and Sales Growth Against Tax Avoidance in Food and Beverage Manufacturing Companies. *Indonesian Journal of Innovation Studies*, 21. <https://doi.org/10.21070/ijins.v21i.757>
40. Migliaccio, G., & Tucci, L. (2020). Economic assets and financial performance of Italian wine companies. *International Journal of Wine Business Research*, 32(3). <https://doi.org/10.1108/IJWB-04-2019-0026>
41. Mulya, J. H. (2019). Fixed Asset Revaluation: Decision Making. *International Journal of Science and Research (IJSR)*, 8(2). Retrieved from <https://ideas.repec.org/p/osf/osfxxx/s947a.html>
42. Munfaqiroh, S., Rahma, A. N., Sa'adah, L., & Andiani, L. (2023). The Effect of Profitability, Liquidity, and Leverage on Corporate Values with Corporate Social Responsibility (CSR) as Moderating Variable. *Journal of Economics, Finance and Management Studies*, 06(04), 1527-1531. <https://doi.org/10.47191/jefms/v6-i4-15>
43. Narsa, N. P. D. R. H., Afifa, L. M. E., & Wardhaningrum, O. A. (2023). Fraud triangle and earnings management based on the modified M-score: A study on manufacturing company in Indonesia. *Heliyon*, 9(2). <https://doi.org/10.1016/j.heliyon.2023.e13649>
44. Nguyen, T. N. L., & Nguyen, V. C. (2020). The determinants of profitability in listed enterprises: A study from vietnamese stock exchange. *Journal of Asian Finance, Economics and Business*, 7(1). <https://doi.org/10.13106/jafeb.2020.vol7.no1.47>
45. Nwuba, E. B., Omankhanlen, A. E., Chimezie, P. O., & Okoye, L. U. (2020). Financial control systems and financial systems theory: Free cash flow and profitability nexus: A comparative study of manufacturing companys in Nigeria and Ghana. *WSEAS Transactions on Systems and Control*, 15. <https://doi.org/10.37394/23203.2020.15.67>
46. Okpara Jude, A., & Okpanachi, S. E. (2022). Effect of Capital Structure on the Profitability of Non-Financial Institutions in Nigeria. *Journal of Business Administration Research*, 11(1). <https://doi.org/10.5430/jbar.v11n1p37>
47. Prasetya Margono, F., & Gantino, R. (2021). Influence of Company Size, Leverage, Profitability, and Dividend Policy on Company Value of Companies in Indonesia Stock Exchange. *Copernican Journal of*

- Finance & Accounting*, 10(2). <https://doi.org/10.12775/cjfa.2021.007>
48. Putri, M. P., & Lusy. (2021). Effect of Ownership of Blockholder, Intangible Assets, and Company Size on Company Value. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 5(2). <https://doi.org/10.29040/ijebar.v5i2.2414>
 49. Ravindran, M., & Kengatharan, L. (2021). Impact of Financial Leverage on Company Profitability: Evidence from Non-Financial Companies Listed in Colombo Stock Exchange- Sri Lanka. *South Asian Journal of Finance*, 1(1). <https://doi.org/10.4038/sajf.v1i1.29>
 50. Restianti, T., & Agustina, L. (2018). The Effect of Financial Ratios on Financial Distress Conditions in Sub Industrial Sector Company. *Accounting Analysis Journal*, 7(1). <https://doi.org/10.15294/aaj.v7i1.18996>
 51. Salgado, P., Carrasco, V., & Pinho De Mello, J. M. (2017). Product market competition and the severity of distressed asset sales. *Review of Finance*, 21(5). <https://doi.org/10.1093/rof/rfw005>
 52. Senani, K. G. P., Ajward, R., & Kumari, J. S. (2022). Determinants and consequences of integrated reporting disclosures of non-financial listed firms in an emerging economy. *Journal of Financial Reporting and Accounting*. <https://doi.org/10.1108/JFRA-03-2022-0083>
 53. Shin, G. H., & Groth, J. C. (2012). Fixed asset sales by financially distressed companies: Bank pressure or bankruptcy avoidance. *Investment Management and Financial Innovations*, 9(4). Retrieved from <https://www.businessperspectives.org/index.php/journals/investment-management-and-financial-innovations/issue-87/fixed-asset-sales-by-financially-distressed-firms-bank-pressure-or-bankruptcy-avoidance>
 54. Shrestha, P. M., & Lamichhane, P. (2022). Effect of Company-Specific Variables on Stock Returns: Evidence from Nepal. *Quest Journal of Management and Social Sciences*, 4(2). <https://doi.org/10.3126/qjms.v4i2.50320>
 55. Sugiharto, B., Putri, T. E., & Nur'alim, R. M. (2021). The Effect of Liquidity, Leverage, and Sales Growth on Financial Distress with Profitability as Moderating Variables. *Journal of Accounting for Sustainable Society (JASS)*, 3(1). <https://doi.org/10.35310/jass.v3i01.895>
 56. Sumantri, F. A., Kusnawan, A., & Anggraeni, R. D. (2022). The Effect of Leverage, Sales Growth and Profitability on Tax Avoidance. *Jurnal Ekonomi Dan Bisnis*, 20(1). <https://doi.org/10.31253/pe.v20i1.861>
 57. Surbakti, M. A., & Wijayanti, N. A. (2022). Company Performance, Company Size, Leverage, and Growth on the Level of Corporate Social Responsibility Disclosure in Non Financial Companies. *E-Jurnal Akuntansi*, 32(7). <https://doi.org/10.31253/pe.v20i1.861>
 58. Susanti, F. E., Widiyanti, N., & Madyawati, E. (2022). The Impact of Company Size, Leverage, and Sales Growth on Company Performance. *Asia Pacific Journal of Business Economics and Technology*, 2(01). Retrieved from <https://www.apjbet.com/index.php/apjbet/article/view/21>
 59. Ullah, A., Pinglu, C., Ullah, S., Zaman, M., & Hashmi, S. H. (2020). The nexus between capital structure, company-specific factors, macroeconomic factors and financial performance in the textile sector of Pakistan. *Heliyon*, 6(8). <https://doi.org/10.1016/j.heliyon.2020.e04741>
 60. Umar, M. P., Paramita, R. W. D., & Taufiq, M. (2021). The Effect of Leverage, Sales Growth and Profitability. *Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak*, 5(1). <https://doi.org/10.30741/assets.v5i1.679>
 61. Utami, N. (2020). Analysis of the Influences of Dividend Payout Ratio, Return on Equity, Growth and Company Size on Stock Value with Leverage as Mediating Variable. *Jurnal Akademi Akuntansi*, 3(1). <https://doi.org/10.22219/jaa.v3i1.11501>
 62. Wafiyudin, M., Cinintya Pratama, B., Fitriani, A., & Rachmawati, D. E. (2020). The Effect of Institutional Ownership, Intellectual Capital, and Company Size Towards Company Value. *Business and Accounting Research (IJEBAR)*, 4(2). <https://doi.org/10.29040/ijebar.v4i03.1195>
 63. Wilyaka, P. (2021). The Effect of Return on Asset, Sales Growth, Leverage and Capital Intensity on Tax Avoidance of Mining Companies Listed on The Indonesia Stock Exchange Period 2017–2020. *Proceedings: Economics and Business*, 1(1). Retrieved from <https://jurnal.buddhidharma.ac.id/index.php/pros/article/view/1140>
 64. Yadav, I. S., Pahi, D., & Goyari, P. (2020). The size and growth of companies: new evidence on law of proportionate effect from Asia. *Journal of Asia Business Studies*, 14(1). <https://doi.org/10.1108/JABS-12-2018-0348>
 65. Yohan, & Pradipta, A. (2019). The Influence of Profitability, Leverage, Company Size, and capital Intensity Ratio Towards Tax Avoidance. *Jurnal Bisnis Dan Akuntansi*, 21(1). <https://doi.org/10.34208/jba.v21i1a-1.704>
 66. Yuniningsih, Y., Pertiwi, T. K., & Purwanto, E. (2019). Fundamental factor of financial management in determining company values. *Management Science Letters*, 9(2). <https://doi.org/10.5267/j.msl.2018.12.002>