

# Decoding Financial Performance: The Role of Leverage and Market Risk in Indonesia's LQ45

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## ABSTRACT

This study examines the determinants of financial performance in LQ45 Index companies from 2018–2022. It focuses on factors such as equity multiplier, interest coverage, financial leverage, fixed charge coverage, debt to EBITDA, capitalization ratio, and market risk. Control variables include company age, sales growth, and firm size. Using multiple regression analysis on data from 48 companies, the study finds that interest coverage, fixed charge coverage, market risk, company age, and sales growth positively impact financial performance, while financial leverage, debt to EBITDA, capitalization ratio, and firm size have a negative effect. The equity multiplier shows no significant influence. The findings suggest maintaining high interest and fixed charge coverage ratios and effective risk management to enhance financial performance. Careful management of high debt to EBITDA levels is necessary to prevent negative impacts. Investors should consider these factors when assessing a company's financial health.

**Keywords:** Financial performance; index LQ45; leverage; market risk.

## INTRODUCTION

One indication that a company has the capability to maximize resource utilization is by evaluating its profitability and profits [10]. Several companies included in the LQ45 index experienced significant fluctuations in their profits, particularly from 2018 to 2020. A number of variables, such as leverage, company size, and sales growth, can impact a company's financial performance [18]. We can say that the company has an optimal leverage level when marginal benefits and marginal costs are equal [7]. Financing through debt can be considered better than financing through equity issuance due to uncertain administrative costs and dividend distribution. The profitability level of a company can serve as a reflection of its ability to manage its liabilities and capital effectively [9].

Although financial performance has been a classic and frequently discussed topic, it remains crucial and vital for many parties. For investors, financial performance determines whether a company is worth investing in. For management and employees, financial performance significantly impacts them as it affects the bonuses they receive. Numerous studies have gathered information on the factors that may affect financial performance. The use of ratio analysis from financial statements can facilitate quick evaluations of financial conditions, providing indications of a company's financial health [21].

A study involving the equity multiplier, financial leverage ratio, fixed charge coverage ratio, and the total debt-to-EBITDA ratio as measures of a company's financial leverage is still rare [7]. This motivates the researcher to conduct a study in Indonesia, aiming to test the concept of financial leverage using measurement methods not commonly employed in previous research. Internal and external factors can impact financial performance; financial leverage is considered an internal factor. The results aim to offer investors a more comprehensive understanding of internal factors influencing financial performance, helping them better assess a company's financial risk and make informed decisions about its stability and growth potential. As [45] highlights, market risk is an external factor that influences a company's financial performance. The innovation in this study lies in incorporating the market risk variable, as suggested by [45], providing new insights for investors evaluating companies under varying market conditions. By including both internal factors (financial leverage) and external factors (market risk), the study offers novice investors a holistic view of the risks and opportunities associated with a company.

Many novice investors use the LQ45 index as a reference to buy shares of companies in the secondary market. One reason novice investors choose to invest in companies included in LQ45 is that they have high liquidity. Once investors receive the list of

these companies, further filter by examining the financial performance and fair stock price of these companies. The LQ45 index encompasses a wide range of industrial sectors, including consumer goods, finance, mining, technology, and others, suggesting that a sizable number of Indonesian businesses are represented by LQ45. The research samples for this study include companies that were included in the LQ45 index between 2018 and 2022.

## Literature Review and Hypothesis Development

### *Financial Performance*

Evaluating a company's financial performance is crucial, as it serves as a parameter to assess whether the company outperforms its competitors. There are three main objectives of corporate performance: generating adequate profits, ensuring the company can meet its financial obligations, and maintaining continuous business sustainability [25]. Good financial performance can indicate operational sustainability, growth potential, and the company's competitiveness in the industry. Through financial performance analysis, management and investors can understand how well the company generates profits, manages debt, and provides returns to shareholders.

A company's ability to evaluate and monitor its financial performance over time will determine how well its strategies and actions work out. By consistently tracking financial performance metrics, companies can identify trends, predict potential issues, and take corrective actions to ensure long-term financial health. To assess a company's financial performance, key indicators include profitability ratios like ROA, ROE, and EPS. Whereas ROE gauges the return on investment for shareholders, ROA assesses how well the business uses its assets to generate profit. EPS provides an indication of the earnings per share available to shareholders. Some investors use Tobin's Q ratio in addition to profitability measures to assess how much a firm is worth on the market versus its book value. A high Tobin's Q indicates strong investor expectations for the company's financial performance. On the other hand, a company is seen to have failed in accomplishing its goal of optimizing value if its Tobin's Q ratio is less than 1 [35].

Market risk and a company's degree of leverage are two things that can affect how well it performs. Leverage serves as a tool to evaluate a company's capital structure. If a company maintains an optimal capital structure, its value can increase [7]. [26] Aside from leverage, corporate governance also affects financial performance. Factors such as the number of directors, the percentage of women on the

board, and the short-term debt ratio can evaluate this.

### *Equity Multiplier and Financial Performance*

The equity multiplier [1] reflects the extent to which a company relies on debt as a funding source, thereby estimating its risk level. A low equity multiplier indicates greater reliance on internal financing. Companies utilizing more internal financing demonstrate greater flexibility in strategy formulation as they are free from interest payment obligations, leading to lower fixed costs. Minimizing debt reduces the financial burden associated with interest payments, potentially increasing net profit available for reinvestment, innovation, or dividend distribution. Furthermore, based on trade-off theory, relying on more debt increases the risk of bankruptcy, which can ultimately reduce the firm's value [48].

Previous research aligns with these theoretical insights. For example, [7] and [44] found that a higher equity multiplier significantly improved financial performance. This suggests that businesses with greater debt financing will perform worse financially. Whether they are profitable or not, businesses that depend more on debt will have to pay interest each year, which can impact the company's overall financial performance [44]. On the other hand, a study conducted by [36] revealed a significant negative effect of the equity multiplier on the performance of microbanks in Pakistan. Based on the discussion above, the hypothesis is proposed with the following statements:

H<sub>1</sub>: Equity multiplier affects the financial performance.

### *Interest Coverage and Financial Performance*

Interest coverage evaluates the extent to which a company's EBITDA can cover its interest obligations. A high interest coverage ratio suggests lower reliance on debt, indicating better solvency [7]. Companies with high interest coverage ratios are likely to secure loans at lower interest rates, enhancing profitability by reducing borrowing costs. Studies have demonstrated that interest coverage significantly enhances a company's financial performance [7] and [47]. This indicates the company's financial stability and does not place excessive pressure on its financial performance through annual interest payments. As a result, the company's financial performance tends to be better and more stable. To enhance this ratio, companies should focus on lowering interest expenses and increasing EBIT. Drawing from the aforementioned discussion, we propose the following hypothesis:

H<sub>2</sub>: Interest coverage affects the financial performance.

### ***Fixed Charge Coverage Ratio and Financial Performance***

Companies with high fixed costs need sufficient profit margins to cover these expenses. The fixed charge coverage ratio measures the extent to which a company's fixed costs, including lease and interest expenses, are covered by its EBITDA. A lower fixed charge coverage ratio indicates a higher proportion of fixed costs, which means management must generate a greater margin to cover these expenses.

A low fixed charge coverage ratio indicates elevated financial risk for the company. If a company struggles to pay its fixed costs, it can lead to liquidity problems, credit downgrades, or even bankruptcy risk. Consequently, the business might have to pay higher interest rates on new loans or even struggle to get more. Difficulties in paying fixed costs may also impact the company's financial flexibility. Lower financial performance could result from the company's inability to react swiftly and efficiently to changes in the market or investment opportunities. The fixed charge coverage ratio has a notably good impact on financial performance, according to research by [7] and [30]. Thus, in light of the above discussion, the following hypothesis is put forth:

H<sub>3</sub>: Fixed charge coverage ratio affects the financial performance.

### ***Degree of Financial Leverage and Financial Performance***

The degree of financial leverage (DFL) is a useful metric for evaluating how the net income of a business reacts to changes in EBIT. This ratio shows how taxes and interest affect the net income of a business. With reduced debt usage, a company incurs lower interest expenses, leading to a lower degree of financial leverage (DFL). A lower DFL indicates higher financial performance [7]. A company's working capital—which includes both debt and equity—can help it perform better financially if it is at an ideal level. The financial risk to the company may rise with a high DFL. Increased market volatility, interest rate swings, and unpredictable economic conditions can make the company more susceptible to declines in net income and overall financial performance. In contrast to [7], [28] and [41] discovered that DFL had a favorable effect on financial performance. This indicates that a high DFL encourages company management to continuously improve financial performance, allowing

the company to generate greater profits than its fixed payment obligations. Consequently, the company's financial performance can become more stable and improve. Based on the previously discussed discourse, we propose the following hypothesis:

H<sub>4</sub>: The degree of financial leverage affects the financial performance.

### ***Debt to EBITDA and Financial Performance***

Companies that rely on debt as a funding source will have a higher ratio, indicating a higher level of risk. Companies often prefer debt financing due to its many advantages, such as interest expenses being tax-deductible [7]. However, high debt levels can result in limited liquidity for the company. Substantial interest payments and other debt obligations can constrain the company's ability to manage cash flow flexibly, particularly during emergencies or unexpected market fluctuations.

Studies by [7] and [6] show that debt to EBITDA has a highly detrimental effect on financial success. When a company's debt-to-EBITDA ratio is high, it means that its debt is substantial in relation to its operating profits. Due to the large interest burden this causes, there may be less net income available for long-term investments or business development. High debt can hinder a company's ability to invest in expansion, innovation, or new business development. These restrictions weaken financial performance. Based on the previously discussed discourse, we propose the following hypothesis:

H<sub>5</sub>: Debt to EBITDA affects the financial performance.

### ***Capitalization Ratio and Financial Performance***

A higher capitalization ratio indicates that the company relies more on debt to meet its capital needs. A high capitalization ratio can suggest that the company has optimized its capital structure. By efficiently utilizing debt, the company can allocate its own capital (equity) to more strategic investments or generate higher returns. However, relying more on debt to meet operational needs also increases risk, as the company has interest payment obligations, leading to higher fixed costs.

Research by [7], [19], and [31] demonstrates a significantly negative effect of the capitalization ratio on financial performance. A low capitalization ratio indicates that the company uses less debt as a source of operational funding. The company lowers the interest burden each period by using less borrowed capital. This increases the net income available for business development, dividend distribution, or long-term investments. Drawing on the above given discourse, the following hypothesis is put forth:

H<sub>6</sub>: Capitalization ratio affects the financial performance.

### ***Market Risk and Financial Performance***

A company must have the ability to turn risks into opportunities, which can then enhance its financial performance. These opportunities are anticipated to enhance the company's financial performance. A company's reputation, sound decision-making, operational efficiency, and assurance of accurately identified and appropriately managed risks all heavily depend on effective risk management [17]. Companies often grapple with the challenge of market risk. We cannot eliminate market risk, also known as systematic risk, but we can mitigate it through hedging [14]. The volatility of a company's stock prices determines market risk, as it can also lead to volatility in the company's asset values [45]. We can use beta as an indicator to compare a company's systematic risk to market risk [15]. This study will use beta, which compares the return on the company's shares with the market index, to evaluate market risk.

Market risk has been shown to have a notably detrimental effect on financial performance [45] and [16]. This is consistent with the findings of [8], but it differs from the findings of [4], who found a positive impact. Due to the tendency of stock market investors to anticipate potential impacts, when good or bad news emerges, they tend to react by buying or selling stocks, thereby increasing market volatility. This indicates that if a company is able to effectively utilize the risks and opportunities available (as indicated by stock price volatility), the company has the potential to achieve better financial performance. Drawing on the above given discourse, the following hypothesis is put forth:

H<sub>7</sub>: Market risk affects the financial performance.

### ***Firm Age and Financial Performance***

Investor interest in mature companies makes it easier for these firms to secure funding. Older companies typically have a well-established market reputation. A strong reputation can enhance trust among customers, suppliers, investors, and business partners, which in turn can create new business opportunities and improve financial performance. The age of a company not only indicates its access to funding but also provides greater bargaining power in negotiating financing costs, which can directly influence the optimal capital structure [46].

According to [32], the age of a company has a significantly positive impact because older companies have experience in leveraging key business knowledge, such as effective use of technology, well-developed

supply chain systems, strong and loyal customer relationships, better access to suppliers, quality resources, and lower operating costs. This accumulated knowledge allows companies to enjoy better performance. [32] found a significantly positive impact of firm age on financial performance, which can be attributed to the accumulation of knowledge and experience. However, [45] and [33] reported a negative impact, while [5] observed a positive relationship for manufacturing companies. This indicates that older companies, with their long-standing reputation, can optimally achieve operational cost efficiency and increase product prices, further enhancing their financial performance. Drawing on the above given discourse, the following hypothesis is put forth:

H<sub>8</sub>: Firm age affects the financial performance.

### ***Sales Growth and Financial Performance***

When a company completes a service or delivers goods that are part of its core business, it generates revenue from the transaction, which is referred to as sales [12]. Sales growth is the difference in sales levels between this year and the previous year. We use sales growth to evaluate the sales department's performance and often view it as an indicator of the business's financial health and expansion [34]. A company that consistently increases its sales from year to year can enhance its performance. [11], [7], and [40] identified a significantly positive impact of sales growth on financial performance. Consistently positive sales growth can reflect that the company has strong business activities, which directly contribute to increased company revenue. With more revenue, the company has the potential to generate larger profits, which in turn enhances overall financial performance. Drawing on the above given discourse, the following hypothesis is put forth:

H<sub>9</sub>: Sales growth affects the financial performance.

### ***Firm Size and Financial Performance***

Companies with large assets indicate that they have substantial capital to operate their business due to their significant resources. For instance, telecommunications operators must regularly upgrade their equipment every five years to remain competitive, ensuring that the quality of service provided to customers continuously improves. We expect enhanced service quality to boost the company's overall customer base and boost its financial performance. Operational advantages, like the ability to capitalize on economies of scale and market power, are often found in larger companies [45]. These advantages can enhance financial performance

as the company can capitalize on available opportunities. Larger companies also tend to have a lower risk of bankruptcy, resulting in lower capital costs compared to smaller companies, which face higher bankruptcy risks [37].

[27] and [22] identified a significantly positive effect of company size on financial performance. However, [13] reported a negative impact. This indicates that large company size can bring more complex management risks. Companies may face challenges in effectively managing risks, coordinating between departments or divisions, and maintaining a clear strategic focus. This can hinder the company's flexibility in adapting to market changes, following new trends, or responding to evolving customer needs. In turn, this may reduce the company's financial performance. Drawing on the above given discourse, the following hypothesis is put forth:

H<sub>10</sub>: Firm size affects the financial performance.

## RESEARCH METHOD

### Population, Sample, and Data

The study's population includes companies listed in the LQ45 index between 2018 and 2022. This study's analysis employs a panel data approach that combines cross-sectional and time series components. The study makes use of secondary data, such as annual reports and financial statements of businesses included between 2018 and 2022 in the LQ45 index. The official IDX website as well as the websites of the individual companies provided this data. A research sample of 48 organizations that satisfied certain requirements was chosen using purposive sampling.

We have grouped these 48 companies into the following 9 industry sectors: 1) property and building construction; 2) trade, services, and investment; 3) finance; 4) consumer goods; 5) infrastructure and transportation; 6) basic industry and chemicals; 7) mining; 8) agriculture; and 9) miscellaneous industry. Following categorization, the majority of the sample in this study is made up of businesses in the property & building construction industry, with 9 businesses accounting for 18.75% of the overall sample. With only one firm representing 2.08% of the industry, the miscellaneous industry has the fewest companies.

### Data Testing Method & Regression Model

The panel data regression analysis uses three models: the common effect model (pooled least squares), the fixed effects model (FEM), and the random effects model (RANEF). We conduct three stages of testing to determine the appropriate and

well-interpretable model. The first stage involves the Chow test to decide between the common effects model and the fixed effects model, followed by the Hausman test to select between the fixed effects model and the random effects model.

This study employs panel data regression as its analysis method. The aim is to analyze and test the impact of EQMP, INCE, FCCR, DOFL, LVGRA, CAPR, MRISK, and the control variables AGE, SALGW, and SIZE on the financial performance, which consists of ROA, ROE, EPS, and Tobin's Q, of companies that have been included in the LQ45 index during the period 2018-2022.

$$ROA_{i,t} = \alpha + \beta_1(EQMP)_{i,t} + \beta_2(INCE)_{i,t} + \beta_3(FCCR)_{i,t} + \beta_4(DOFL)_{i,t} + \beta_5(LVGRA)_{i,t} + \beta_6(CAPR)_{i,t} + \beta_7(MRISK)_{i,t} + \beta_8(AGE)_{i,t} + \beta_9(SALGW)_{i,t} + \beta_{10}(SIZE)_{i,t} + \mu_{i,t} \tag{1}$$

$$ROE_{i,t} = \alpha + \beta_1(EQMP)_{i,t} + \beta_2(INCE)_{i,t} + \beta_3(FCCR)_{i,t} + \beta_4(DOFL)_{i,t} + \beta_5(LVGRA)_{i,t} + \beta_6(CAPR)_{i,t} + \beta_7(MRISK)_{i,t} + \beta_8(AGE)_{i,t} + \beta_9(SALGW)_{i,t} + \beta_{10}(SIZE)_{i,t} + \mu_{i,t} \tag{2}$$

$$EPS_{i,t} = \alpha + \beta_1(EQMP)_{i,t} + \beta_2(INCE)_{i,t} + \beta_3(FCCR)_{i,t} + \beta_4(DOFL)_{i,t} + \beta_5(LVGRA)_{i,t} + \beta_6(CAPR)_{i,t} + \beta_7(MRISK)_{i,t} + \beta_8(AGE)_{i,t} + \beta_9(SALGW)_{i,t} + \beta_{10}(SIZE)_{i,t} + \mu_{i,t} \tag{3}$$

$$TOB_{i,t} = \alpha + \beta_1(EQMP)_{i,t} + \beta_2(INCE)_{i,t} + \beta_3(FCCR)_{i,t} + \beta_4(DOFL)_{i,t} + \beta_5(LVGRA)_{i,t} + \beta_6(CAPR)_{i,t} + \beta_7(MRISK)_{i,t} + \beta_8(AGE)_{i,t} + \beta_9(SALGW)_{i,t} + \beta_{10}(SIZE)_{i,t} + \mu_{i,t} \tag{4}$$

ROA	=	Return on Assets
ROE	=	Return on Equity
EPS	=	Earnings per Share
TOB	=	TOBIN'S Q
EQMP	=	Equity Multiplier
INCE	=	Interest Coverage
FCCR	=	Fixed Charge Coverage Ratio
DOFL	=	Degree of Financial Leverage
LVGRA	=	Debt to EBITDA
CAPR	=	Capitalization Ratio
MRISK	=	Market Risk
AGE	=	Usia Perusahaan
SALGW	=	Sales Growth
SIZE	=	Ukuran Perusahaan
μ	=	error item

### Measurements

In order to determine the correlations between the independent, control, and dependent variables, this study measures each variable. Table 1 provides specifics about the measurements for every variable.

Table 1. Measurement Each Variable

Var	Formula	Sources
<b>Dependent variables</b>		
ROA	$\frac{Net\ income}{Total\ assets}$	[46]
ROE	$\frac{Net\ income}{Total\ equity}$	[46]
EPS	Derived from the EPS presented in the income statement section of the financial report.	
TOB	$\frac{Total\ market\ value\ of\ firm}{(no.\ of\ shares\ outstanding \times share\ price)}$ $Total\ asset\ of\ firm$	[20]
<b>Independent variables</b>		
EQMP	$\frac{Total\ Assets}{Total\ Equity}$	[36]
INCE	$\frac{EBIT}{Interest\ Expense}$	[7]
FCCR	$\frac{(EBIT + lease\ payment)}{(Interest\ payment + Lease\ payment)}$	
DOFL	$\frac{\left\{ \frac{Net\ Income_t - Net\ Income_{t-1}}{Net\ Income_{t-1}} \right\}}{\left\{ \frac{EBIT_t - EBIT_{t-1}}{EBIT_{t-1}} \right\}}$	[7]
LVGRA	$\frac{Total\ Debt}{EBITDA}$	[7]
CAPR	$\frac{Total\ Debt}{(total\ debt + shareholder\ equity)}$	[7]
MRISK	$\beta = \frac{n \sum (R_{it} - \bar{R}_{it})(R_{mt} - \bar{R}_{mt})}{n \sum (R_{mt} - \bar{R}_{mt})^2}$	[23]
Stock return: $R_{it} = \frac{P_1 - P_{t-1}}{P_{t-1}}$		
Market return: $R_{mt} = \frac{IHSG_1 - IHSG_{t-1}}{IHSG_{t-1}}$		
Description: β = market's beta Rmt = index's return R̄mt = average index's return Rit = stock's return R̄it = average stock's return n = total samples		
<b>Control Variables</b>		
AGE	Natural logarithm of the year of research minus the year the company was established.	[38]
SALGW	$\frac{Current\ year\ sales - previous\ year\ sales}{Previous\ year\ sales}$	[7]
SIZE	Natural logarithm of the company's total assets.	[7]

RESULTS AND DISCUSSION

Descriptive Statistic

By analyzing the lowest, maximum, mean, and standard deviation values of a dataset, descriptive statistics is a data processing technique that offers an overview or description of the dataset. The highest and lowest values of each variable are observed using the maximum and minimum values. Every variable's central value is found using its mean value. The standard deviation value is used to assess the homogeneity of each variable. Descriptive statistics describe data using a statistical approach for each variable, namely ROA, ROE, EPS, TOBINSQ, EQMP, INCE, FCCR, DOFL, LVGRA, CAPR, MRISK, AGE, SALGW, and SIZE. The results of the descriptive statistical analysis are presented in Table 2.

Table 2. Descriptive Statistics

	N	Mean	Median	Max	Min	Std. Dev.
ROA	240	0.064	0.051	0.481	-0.183	0.08
ROE	240	0.15	0.117	2.212	-1.423	0.276
EPS	240	279.822	120.7	5654.991	-464.84	589.483
TOBIN SQ	240	1.278	0.626	17.254	0.036	2.094
EQPM	240	3.212	2.061	18.071	1.115	2.832
INCE	240	27.347	4.287	679.765	-30.311	81.018
FCCR	240	8.869	3.454	142.247	-72.863	18.449
DOFL	240	2.193	1.197	219.908	-105.175	20.396
LVGRA	240	8.987	3.875	163.834	-8.417	15.59
CAPR	240	0.534	0.515	0.945	0.103	0.224
MRISK	240	1.141	1.182	2.455	-1.331	0.502
AGE	240	3.646	3.689	4.927	1.609	0.547
SALGW	240	0.11	0.076	6.243	-0.584	0.453
SIZE	240	31.45	31.131	35.228	27.223	1.409

Source: Data processed by Eviews 9

Model Fit Test

The test results show that the decision is to reject H<sub>0</sub>, which means that the model used is the Fixed Effect Model (FEM). The Hausman test results also indicate that for models 1-4, the probability values are lower than 0.05, thus the decision is to reject H<sub>0</sub> and use FEM. The test results show that the adjusted R-squared values approaching 1 for models 1-4 suggest that the independent variables—such as EQMP, INCE, FCCR, DOFL, LVGRA, CAPR, and MRISK—and control variables like AGE, SALGW, and SIZE, explain most of the variation in ROA, ROE, EPS, and Tobin's Q.

The F-test analysis results reveal that the independent variables—such as EQMP, INCE, FCCR, DOFL, LVGRA, CAPR, and MRISK—and control variables like AGE, SALGW, and SIZE, have a significant impact on the dependent variables

including Tobin's Q, ROE, EPS, and ROA. This suggests that the regression model is suitable for use.

### T-test Result

**Table 3.** T-test Result

Variables	ROA (model 1)	ROE (model 2)	EPS (model 3)	TOB (model 4)
Constanta	0.885	1.165	458.670	23.716
Equity Multiplier	-0.002	0.002	-12.723	-0.008
Interest coverage	0.398	0.783	0.324	0.709
Fixed charge coverage ratio	0.000	0.000	0.070	0.004
Degree of financial leverage	0.255	0.138	0.000*	0.001*
Debt to EBITDA	0.002	0.002	0.895	0.007
Capitalization ratio	0.000*	0.000*	0.009*	0.453
Market Risk	0.000	0.000	-0.459	0.000
Age	0.215	0.003*	0.035*	0.231
Sales Growth	0.000	-0.004	-2.041	-0.002
Size of firm	0.000*	0.000*	0.016*	0.567
	-0.024	0.162	48.660	0.530
	0.413	0.008*	0.540	0.002*
	0.007	0.008	9.606	0.117
	0.027*	0.033*	0.128	0.000*
	0.038	0.208	271.335	0.750
	0.099	0.000*	0.000*	0.028*
	0.023	0.070	46.076	0.347
	0.005*	0.000*	0.038*	0.000*
	-0.031	-0.059	-36.877	-0.801
	0.016*	0.001*	0.153	0.000*

Source: Data processed by Eviews 9

\*significance at a 5% level

### Equity Multiplier Affects Financial Performance

Table 3's study demonstrates that the equity multiplier has a negligible negative influence on ROA and a positive but small impact on ROE, EPS, and Tobin's Q. This result is consistent with the assertion made by [24], according to which the equity multiplier has no discernible impact on a company's financial success. Regardless of a company's funding arrangement, ROA gauges how well it uses its assets to produce profit. The interest load from debt may rise with a bigger equity multiplier, reducing net income and, consequently, ROA. Effective asset management, however, could counteract this effect and render the association negligible or weak. By using leverage to boost shareholder returns, the equity multiplier raises ROE. Higher debt also raises interest rates and financial risk, which limits the overall impact, therefore the beneficial benefit is frequently minimal. Companies maintaining a strong market share and executing cost-efficiency strategies might find that their financing methods, whether internal or external, do not significantly alter financial performance. EPS, which is influenced by net income, outstanding shares, and dividend policies, is not solely driven by the debt ratio. The relationship

between the equity multiplier and EPS is less clear because companies with effective cost-control or earnings growth strategies may still generate greater EPS even with a higher equity multiplier.

Likewise, Tobin's Q, which indicates a company's market value relative to its asset value, is also affected by growth prospects, operational performance, innovation, and business strategy. While the equity multiplier may affect Tobin's Q through changes in equity multiplier, its impact is typically overshadowed by variables like growth potential, market sentiment, operational performance, and innovation capacity.

For LQ45 companies, which are often industry leaders, competitive advantages such as cost management expertise may minimize the impact of a high or low equity multiplier on ROA, ROE, and EPS. Since these companies effectively manage debt and operational costs, their financial performance is less volatile in response to changes in equity multiplier. Investors analyzing LQ45 firms should assess how consistently they maintain stable profit margins and control debt, rather than focusing solely on equity multiplier. This stability, coupled with cost efficiency, indicates long-term growth potential, making LQ45 companies attractive for investors seeking reliable performance in fluctuating market conditions.

### Interest Coverage Affects Financial Performance

Table 3 demonstrates through regression analysis that interest coverage positively and significantly influences EPS and Tobin's Q. Higher interest coverage levels enhance EPS and Tobin's Q because companies that can comfortably meet their interest obligations with operational income tend to experience greater financial stability and improved overall performance. With sufficient income to cover debt, these firms have the flexibility to reinvest in growth, which can further boost EPS. Moreover, companies with higher interest coverage ratios are perceived as lower risk by investors, boosting market confidence. This increased confidence drives up market value, resulting in a higher Tobin's Q, as these firms are viewed as financially sound and capable of sustained growth. These findings align with [7], who assert the significant positive influence of interest coverage on financial performance.

For investors, especially when analyzing LQ45 companies, a high interest coverage ratio suggests lower financial risk, making the company more attractive due to its capacity to reinvest in growth and maintain profitability. This not only boosts EPS but also increases market confidence, driving up Tobin's Q by reflecting a higher market value relative to asset value. Investors can use interest

coverage as a key metric when evaluating LQ45 companies to determine both financial stability and growth potential, as companies with higher ratios are viewed as less risky and capable of sustained growth.

On the other hand, interest coverage had no discernible influence on ROA or ROE, supporting [2], who found no significant impact of interest coverage on these profitability measures. While ROE represents returns created for shareholders based on equity, ROA concentrates on how well a business uses its assets to generate profit. Interest coverage offers little insight into the operational success measured by ROA and ROE because it focuses more on a company's capacity to pay debt interest. For investors assessing LQ45 companies, this implies that while interest coverage may highlight a firm's financial stability, it does not necessarily reflect its operational efficiency or profitability in generating returns from assets or equity.

#### ***Fixed Charge Coverage Ratio Affects Financial Performance***

Table 3 shows that the fixed charge coverage ratio positively and statistically significantly impacts ROA, ROE, and EPS. These results are in line with the study by [7], which shows that a set charge coverage ratio has a major favorable impact on business success. Management will work hard to maintain a high fixed charge coverage ratio to facilitate external funding when needed. Lenders and investors perceive a high fixed charge coverage ratio as an indication of reduced default risk, which can result in more favorable terms for debt and equity financing. This access to funding supports growth and further strengthens financial performance, particularly for ROA, ROE, and EPS.

For LQ45 companies, which are often industry leaders, maintaining a strong fixed charge coverage ratio may lead to more favorable terms for debt and equity financing, further supporting their growth and enhancing financial performance. As a result, investors can use this ratio as a key indicator of financial stability of LQ45 firms.

Conversely, the fixed charge coverage ratio does not significantly impact Tobin's Q. While Tobin's Q emphasizes how effectively a company manages and utilizes its assets to achieve a higher market value, the fixed charge coverage ratio pertains more to the company's capacity to fulfill its fixed obligations (such as interest and rent) using operational income. The market-driven elements that often affect Tobin's Q, such as innovation, market expansion, and asset utilization, are not directly reflected in the fixed charge coverage ratio,

which measures financial stability instead. Therefore, the fixed charge coverage ratio may not provide an accurate picture of how efficiently the company allocates and uses its assets. Therefore, investors assessing LQ45 companies should complement this ratio with other metrics.

#### ***The Degree of Financial Leverage Affects Financial Performance***

According to Table 3, the degree of financial leverage significantly and favorably impacts ROE while having a negative influence on EPS. This aligns with [7], who found that leverage can negatively impact financial performance by reducing shareholder returns if profits fall short of fixed costs. When debt levels rise, companies face higher interest expenses, reducing net income and causing EPS to decline as less income is available for shareholders. A high degree of financial leverage amplifies this effect, as small changes in EBIT lead to disproportionately larger changes in net income due to fixed costs like interest. In favorable conditions, this leverage can magnify ROE, as firms using debt efficiently can enhance shareholder returns, provided profits are sufficient to cover the increased interest expenses. For novice investors, evaluating a company's degree of financial leverage in LQ45 can provide valuable insights into how leverage affects both ROE and EPS. Investors can use DFL as a tool to assess whether these companies are using leverage to their advantage or if they are over-leveraged, posing a higher risk to future earnings.

There is no discernible impact on ROA and Tobin's Q, which aligns with [39], who observed that leverage does not significantly impact these metrics. ROA emphasizes operational efficiency, while Tobin's Q assesses market value relative to asset value, aspects not directly affected by leverage. For investors, this implies that when assessing LQ45 companies, leverage alone may not be a key driver of operational performance or market valuation. Instead, investors should look at other financial ratios, such as interest coverage and fixed charge coverage, to gauge a company's financial health and stability.

#### ***Debt to EBITDA Affects Financial Performance***

Table 3 reveals that the regression analysis results indicate a significant negative impact of Debt to EBITDA on ROA, ROE, and EPS. This implies that a higher level of Debt to EBITDA will reduce ROA, ROE, and EPS. A high debt-to-equity ratio increases the interest burden, reducing net income and thus lowering ROA, while also signalling

that the company's reliance on debt outpaces its earnings potential, reducing ROE. This shrinking net income directly lowers EPS, clearly indicating declining profitability due to the higher debt load. This demonstrates that many businesses are utilizing a significant amount of debt, leading to a substantial interest burden and potentially contributing to their declining financial performance. These results are consistent with the study by [7], which claims that debt has a substantial negative impact on EBITDA's financial performance.

For investors analyzing LQ45 companies, Debt to EBITDA can serve as a key metric to assess a company's financial risk. While LQ45 companies are generally more resilient, a high debt load relative to earnings may still signal potential risks, especially in periods of rising interest rates or economic downturns. Investors should look for companies that manage their debt levels efficiently to avoid excessive interest burdens, which can erode returns and lower shareholder value.

Debt to EBITDA does not influence Tobin's Q. Tobin's Q evaluates a company's market value in relation to its book or asset value. Tobin's Q incorporates market-related factors like market perception, brand reputation, innovation, and growth potential, which debt to EBITDA does not fully capture. While debt to EBITDA reflects a company's debt level relative to EBITDA, Tobin's Q encompasses a wider range of factors that may not be solely dependent on debt levels. For investors, this indicates that while debt to EBITDA is critical for assessing financial health and profitability, it does not necessarily reflect a company's market valuation or potential for growth.

### ***Capitalization Ratio Affects Financial Performance***

Table 3 demonstrates that although the Capitalization Ratio greatly lowers Tobin's Q, it significantly raises ROE. A higher capitalization ratio indicates a greater reliance on debt, increasing financial risk and potentially lowering market confidence, which can lead to a decline in Tobin's Q. However, this higher debt can positively impact ROE, as companies can leverage debt to generate higher returns for shareholders by financing operations efficiently. These findings align with the findings of [7], which report significant impacts on financial performance. For investors, particularly those analyzing LQ45 companies, this suggests that while higher debt levels may lead to a lower market valuation relative to asset value, these companies may still generate solid returns for shareholders if they manage their debt responsibly.

No significant effect on ROA and EPS, aligning with [3], who found no significant impact on pro-

fitability, as ROA and EPS are more influenced by operational income and efficiency than capital structure. Companies with effective operational income generation may not see substantial shifts in ROA or EPS based solely on the capitalization ratio, as operational performance tends to overshadow the influence of capital structure on these metrics.

### ***Market Risk Affects Financial Performance***

The t-test results in Table 3 reveal a significant positive impact of market risk on ROA, ROE, and Tobin's Q. The positive impact of market risk on ROA suggests that companies with higher market risk may generate greater returns on assets due to increased investor attention and market-driven growth opportunities. Similarly, the effect on ROE is positive, as companies exposed to higher market volatility can experience amplified equity returns during market growth. Higher beta values indicate that a company's stock is more sensitive to market trends and investor sentiment, which can also drive up Tobin's Q when future prospects appear favorable. In the Indonesian stock market, forward-looking investors react to both positive and negative sentiments, further influencing Tobin's Q as market conditions shift. This indicates that investors in the Indonesian stock market tend to look ahead, making the stock market responsive to both positive and negative sentiments. The potential impact of these attitudes on the financial performance of the companies in the future explains this responsiveness. Investors should consider beta values when assessing LQ45 companies, as higher betas often signal greater sensitivity to market trends, offering both opportunities and risks in volatile markets. These results are consistent with [4], which show that systematic risk significantly improves financial success.

Market Risk does not significantly affect EPS. This is consistent with [29], who found that stock price beta does not impact company profitability. This study assesses market risk by evaluating stock price beta, which measures the sensitivity of stock prices to market fluctuations. However, this does not always directly impact EPS, as it is more related to the company's operational performance and management strategy.

### ***Firm's Age Affects Financial Performance***

Table 3 show that company age positively affects ROE, EPS, and Tobin's Q, suggesting that mature companies secure funding more easily and expand, improving financial performance. These results are consistent with those of [5], who indicate that business age significantly improves performance.

Mature companies, such as those often found in the LQ45 index, typically build stronger relationships with investors, lenders, and suppliers, which reduces the cost of capital and increases access to financing. This, in turn, enhances their ability to generate higher returns on equity (ROE), distribute profits more efficiently among shareholders (EPS), and increase their market valuation relative to asset value (Tobin's Q).

Table 3's lack of a substantial impact on ROA is consistent with [42], who discovered that a company's age has no discernible bearing on its financial success because young businesses can attain high ROA through excellent management and innovative business plans. For LQ45 companies, management efficiency and asset utilisation have a greater influence on ROA than age.

### ***Sales Growth Affects Financial Performance***

Table 3 demonstrates that sales growth positively influences all financial performance metrics, suggesting that sustained increases in sales improve financial performance. These findings align with [7], which highlights a strong positive correlation between sales growth and financial results. Strong sales growth improves overall financial performance by increasing revenue and profits and utilizing economies of scale. For LQ45 companies, which are often market leaders with stable operations, strong sales growth amplifies revenue and profitability, driving up ROA, ROE, and EPS as net income increases. Additionally, Tobin's Q benefits from sales growth, as investors see rising sales as a signal of future growth potential, boosting market confidence and stock prices.

### ***Firm's Size Affects Financial Performance***

Table 3 shows a significant negative effect of company size on ROA, ROE, and Tobin's Q, indicating that larger companies may neglect operational efficiency, reducing financial performance. These findings align with [13], which asserts that a company's size significantly negatively impacts its financial performance. Larger companies, even those in the LQ45 index, often face bureaucracy, slower decision-making, and challenges in optimizing resources, which can lower ROA by reducing asset efficiency. Similarly, increased complexity can reduce ROE as shareholder returns decline due to inefficiencies. For Tobin's Q, the negative impact may result from larger firms struggling to meet market growth expectations. Investors should look beyond company size and focus on how effectively these firms manage internal operations and allocate resources efficiently.

The lack of a discernible impact on EPS is in line with [43], who found that company size does not impact profitability, as large companies do not always manage assets efficiently to achieve higher net income per share. This underscores that the company's operational and financial strategy has a greater influence on EPS than just its size.

## **CONCLUSION**

The test findings allow for the following conclusions to be drawn: The equity multiplier does not significantly influence financial performance. Interest coverage has a notable positive effect on earnings per share and Tobin's Q, though it does not affect ROA or ROE. The fixed charge coverage ratio positively impacts earnings per share, ROA, and ROE but does not affect Tobin's Q. The degree of financial leverage significantly negatively impacts earnings per share and positively affects ROE, but it does not influence either ROA or Tobin's Q. Debt to EBITDA has a significant negative effect on ROA, ROE, and earnings per share, though it does not impact Tobin's Q. The capitalization ratio significantly negatively affects Tobin's Q but positively impacts ROE, with no effect on ROA or EPS. While it has little effect on EPS, market risk significantly improves ROA, ROE, and Tobin's Q. Company age is one of the control factors that has no effect on ROA but a considerable positive effect on EPS, ROE, and Tobin's Q. Growth in sales has a beneficial impact on all metrics of financial performance. However, while it has little effect on EPS, firm size has a major negative influence on ROA, ROE, and Tobin's Q.

Managers need to focus on improving financial performance by increasing the fixed charge coverage ratio, either through higher sales or cost efficiency, to enhance stability. They must also manage the company's debt levels carefully, as a higher debt-to-EBITDA ratio can harm financial performance. Using optimal debt helps maintain financial stability and avoid excessive pressure from annual interest payments. The stock's beta, which measures market risk relative to the stock index, can enhance financial performance. High market risk can create more opportunities, so management should be adept at turning risks into opportunities to enhance financial performance.

High interest coverage and fixed charge coverage ratios are indicators of great performance and financial stability; thus, investors should give preference to these companies. They should be wary of companies that have a high debt-to-EBITDA ratio because this can result in inferior returns. Investors should evaluate how well these risks are managed to optimize profits, though, as businesses with significant market risk may present growth opportunities.

Due to its exclusive focus on companies included in the LQ45 index between 2018 and 2022, this study has restrictions that may affect how other types of companies perform. Along with control factors including firm age, sales growth, and company size, the attention is also on company leverage as measured by the equity multiplier, interest coverage, fixed charge coverage, degree of financial leverage, debt to EBITDA, capitalization ratio, and market risk.

Future research should expand the sample by extending the time period and including more companies from different industries. Additionally, future studies could add more independent variables, such as corporate governance metrics like the percentage of women on the board, the number of directors, and the short-term debt ratio.

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