

# The effect of liquidity and leverage on financial performance with company size as a moderating variable: A study on companies listed in Jakarta Islamic Index 30

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## ABSTRACT

### Introduction

The Jakarta Islamic Index is an index on the Indonesia Stock Exchange which contains companies that contribute to the halal industry in Indonesia. However, research on financial performance specifically using liquidity, leverage and company size is still limited.

### Objectives

The research aims to examine the effect of liquidity and leverage on performance financial with company size as a moderating variable. This research aims to find out which companies in the Jakarta Islamic Index 30 are influenced by factors that can improve their financial performance so that they have a more positive impact on companies and investors.

### Method

The subject of this research companies listed on Jakarta Islamic Index 30 for 2020 - 2022. Data collection techniques used in this study were purposive sampling and with a sample size of 114 samples. While the data analysis techniques used in this study is classic multiple regression analysis with interaction.

### Results

The analysis show that liquidity has a significant effect on financial performance, leverage has no effect on financial performance, company size moderates liquidity on financial performance but does not moderate leverage to financial performance.

### Implications

Companies registered on Jakarta Islamic Index 30 can utilize their debt policy to obtain additional capital as long as the use is reasonable and does not burden the company.

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### Originality/Novelty

This study contributes to broaden the knowledge on financial performance of companies listed in Jakarta Islamic Index 30.

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## INTRODUCTION

The post-global crisis economy has had a positive impact, particularly on Indonesian companies, as it creates more competitive business environments. This competition requires companies to strive to improve their financial performance to maintain their business entities. Companies need to have financial statements supported by good financial performance, and their financial reports should comply with regulations governing financial reporting (Naibaho & Hutabarat, 2020). One of a company's goals is profit, meaning that companies must be able to achieve high profits and evaluate and improve their operations for long-term success (Devilia & Prasetyo, 2021; Sitompul & Harefa, 2021). This competition in improving financial performance among companies has positively impacted investors' willingness to invest (Sofyan, 2019). In Indonesia, there has been a drastic increase in stock investors, which rose by 37.68% from 7,489,337 in 2021 to 10,331,152 in 2022 (Kustodian Sentral Efek Indonesia, 2023).

Companies need to improve their financial performance to increase the interest of prospective investors in investing. Financial statements are issued periodically, and to assess the company's condition, an investor needs to analyze the financial statements. Financial statements are analyzed to determine the company's situation. One method of analyzing financial statements is through financial ratio analysis. Financial ratio analysis is a useful method for assessing financial statements by considering the company's performance from one year to another to determine whether the financial performance is healthy or not (Naufal & Fatihat, 2023).

The initial step in investment for an investor is the analysis of financial statements. This analysis is also conducted by financial managers to evaluate the company's future. The financial performance of a company can be measured, in part, by its profitability, which is the ability of the company to generate profit. Therefore, Return on Assets (ROA) is used to approximate financial performance (Kurniawan & Samhaji, 2020). Return on Assets is a measurement in which it indicates the level of effectiveness of management in utilizing assets to generate profit (Christian et al., 2018).

The companies listed in the Jakarta Islamic Index 30 have shown a consistent increase in their Return on Assets (ROA) each year. This upward trend indicates the need for research to identify the factors that can enhance ROA in order to anticipate a potential decline in the future. Companies with high ROA have the opportunity to

enhance their own capital growth (Anggarsari & Aji, 2018). Therefore, this study use ROA for profitability indicator.

Liquidity indicates a company's ability to meet its short-term obligations by the due date, and it is one of the factors that affect financial performance (Brahmana et al., 2018; Islami & Isnuwardhana, 2019). Liquidity ratios are closely related to financial performance because they reflect the level of capital availability for a company to operate (Sukmayanti & Triaryati, 2019). To maintain liquidity, a company's current assets should exceed its current liabilities. If the liabilities exceed the assets, it means the company is not in good financial health (Aryaningsih et al., 2022). The current ratio is used in this study as a measure of liquidity. It assesses how well a company can settle its short-term debts (Devi et al., 2019). A low current ratio suggests that a company may not have sufficient funds to pay its short-term debts or debts nearing their due dates. However, a high current ratio does not guarantee a company's financial well-being. A company with a high current ratio is considered to be in a good condition, as it is capable of paying off its short-term debts or debts approaching their due dates (Dana et al., 2021). This is supported by previous studies indicating that liquidity has a positive and significant impact on financial performance (Laksmi et al., 2020; Shella & Sudjiman, 2021; Sitanggang, 2021).

Another factor influencing financial performance is leverage. Leverage measures the extent to which a company's operational activities are financed through external funds to maximize profits (C. V. J. Purba & Kuncahyo, 2020). As a company grows, it requires more capital, and thus it may rely on debt financing (Riani et al., 2019). The debt to equity ratio is used in this study to assess the level of a company's debt (Azzahra & Wibowo, 2019). However, reliance on external sources of funding does not always provide benefits for a company, as it involves the payment of interest on the debt (Zujeny et al., 2022). If a company's operating income is not sufficient to cover the significant interest expenses, it may lead to financial problems and potential bankruptcy (Naufal & Fatihat, 2023). This is supported previous studies proving that leverage has a negative and significant impact on financial performance (Amartiya & Minan, 2022; Dewi et al., 2021; Nano et al., 2020).

Size of the company can also be a factor affecting financial performance. Financial performance is influenced and determined by the size of the company as evidence of the organization's ability to generate profits (Dewi et al., 2021). According to Law No. 9 of 1995, a company's size is classified into two categories: large-scale and small-scale companies. As the company size increases, both internal and external stakeholders have higher confidence in the company's financing (Dewantari et al., 2019). Therefore, large-scale companies have an advantage in obtaining long-term debt financing, while small companies may not have the same access (Muharramah & Hakim, 2021). Large-scale companies are generally trusted because they are perceived to have more information and experience in dealing with business issues compared to small companies (Marpaung, 2019).

Currently, the focus of an investment is not solely on its profitability, but also on the blessings and halal nature of the investment returns. The halal industry and

Islamic economics have proven to play an important role in economic development both globally and domestically. This is supported by the fact that the majority of the Indonesian population is Muslim, accounting for 231 million people or 85% of the total population. There is a growing interest in evaluating the prospects of the halal business in various sectors such as food and beverages, fashion, cosmetics, pharmaceuticals, tourism, media, and finance (Mujahidin, 2020; Yazid et al., 2020; Yuli & Wojtyla, 2020).

The Indonesian Stock Exchange has also responded to developments in the halal industry by classifying listed companies in the Jakarta Islamic Index (JII). JII is an index for thirty companies in various fields that meet halal criteria based on the fatwa of the National Sharia Council of the Indonesian Ulema Council and the Financial Services Authority. Researchers have studied many shares in JII from various aspects (Agustina, 2020; Dewantara et al., 2023; Winarsih & Fuad, 2022). However, studies that specifically discuss profitability with the influence of leverage and company size are still limited. This study is intended to close the research gap and at the same time contribute to the development of the halal industry in Indonesia.

## LITERATURE REVIEW

### Signaling Theory

Signaling theory, developed by Spence (1973), is based on the information asymmetry between internal and external parties. To address this information imbalance, signals are used to reduce the information asymmetry. There are two parts to this theory: management acts as the signal sender, while investors act as the signal receiver (Dana et al., 2021). The good and bad conditions of the company should be promptly communicated to external parties (Nashar et al., 2022). There are two types of signals: positive signals and negative signals (Rachmawati & Pinem, 2015). Companies give positive signals, and after the signals are received, it is expected that the market will react (Dahlia, 2018). Companies with good financial performance avoid selling shares and will meet their capital needs through other means, whereas companies with little profit will tend to sell shares to meet their capital needs (Devi et al., 2019).

The size of the company is related to the signaling theory. Large companies show progress and will provide positive signals to external parties, such as investors, who will react positively. According to the signaling theory (Spence, 1973), companies with good financial performance send signals to the market using their financial information. Financial reports showing good financial performance indicate (Muharramah & Hakim, 2021). The signaling theory is related to liquidity and leverage variables. Companies that can settle debts and use debt moderately can be said to operate the company optimally.

### Financial Performance

Financial performance describes the financial state of a company by analyzing financial statements at a specific time using financial analysis tools (Sholikha et al., 2019). Whether the financial performance is good or bad in a given period can be

observed from the company's strategy selection and financial statement analysis (Maulina et al., 2023). Financial ratios are classified into four types: liquidity ratios, activity ratios, profitability ratios, and solvency ratios (Sofyan, 2019). The analysis tool used in this research focuses on profitability measurement. Profitability is a measure used to analyze financial statements and reflects the company's ability to increase profits (Khoirunnisaa et al., 2022). Return on assets (ROA) is used to project the financial performance in this research. If the ROA value shows a large figure, it can be concluded that the company is capable of generating profits effectively, resulting in a very good financial performance (Zoraya et al., 2022). ROA itself is divided into two types based on its nature: positive ROA and negative ROA. Positive ROA indicates that the company is able to obtain profits, while negative ROA indicates that the company is unable to generate profits or is experiencing losses.

### Liquidity

Liquidity refers to a company's ability to meet its short-term debts (Muthohharoh, 2021). Liquidity is a measure of a company's ability to settle its short-term debts by comparing current assets to current liabilities (N. M. B. Purba, 2019). Therefore, liquidity determines the company's ability to settle short-term debts. Companies with high liquidity indicate that they are in a profitable condition, which has a positive impact on the company's financial performance. However, if a company has low liquidity value, it is considered illiquid or entering a bankruptcy phase. Companies with low liquidity levels can affect the stock prices involved (Aryaningsih et al., 2022). There are four ways to measure liquidity: current ratio, quick ratio, cash ratio, and inventory to net working capital ratio. In this research, the current ratio is used to measure liquidity. The current ratio compares current assets to current liabilities. Therefore, the more current assets a company has, the greater its liquidity value, while a low liquidity level indicates that the company cannot meet its obligations.

### Leverage

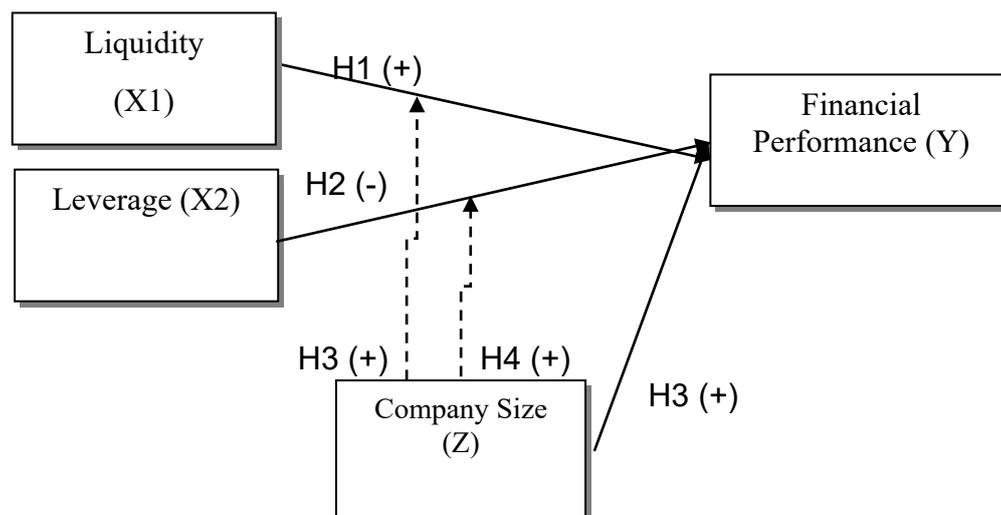
Leverage is a measurement that determines the level of a company's dependence on debt financing (Fatikha & Yudiana, 2021). The funding of a company is divided into two types: internal and external. Internal funding comes from retained earnings of the company, while external funding comes from creditors, stock sales, etc. A company with a higher proportion of external financing compared to internal financing will result in greater liabilities for the company. High levels of leverage require the ability to repay the obligations. The use of external sources of funding carries higher risks because if the company is unable to repay its obligations, it may lead to bankruptcy. There are five types of leverage ratios: debt ratio, debt to equity ratio, interest coverage ratio, fixed interest rate ratio, and debt service ratio. The leverage ratio used in this study is the debt-to-equity ratio. The debt-to-equity ratio is a measure that compares total debt to equity (Sholikha et al., 2019). The more debt a company has, the greater the obligations and interest it must bear.

## Company Size

Company size determines the magnitude of a company. The total assets, sales level, and average sales can be used to determine the size of a company. Companies with a large scale have many assets, allowing them to optimize their performance with the assets they have (Santini & Baskara, 2018). As a result, the larger the company, the more assets it has, indicating positive cash flow and being considered to have good prospects for future financial performance (Aryaningsih et al., 2022). It is believed that company size can affect financial performance by looking at financial statements because the size of a company is assessed based on the accumulation of assets owned by the company (Pangestu & Santoso, 2021). Companies with large total assets enable management to have the freedom to use them to increase profits (Sukmayanti & Triaryati, 2019). Larger companies are more secure because they are more willing to invest in expansion, with their obligations already being settled beforehand (Dewantari et al., 2020).

**Figure 1**

*Research Framework*



Source: Primary data.

## Research Hypotheses

Liquidity determines a company's ability to pay its short-term debts. This condition will cause the company's value to decrease because the funds used will be idle. Current ratio is one of the measuring tools to determine the company's ability to meet its short-term debt obligations. The higher the liquidity value, the more the company is able to meet its short-term obligations, which attracts investors because the risk borne by shareholders is smaller. Previous studies (Krisnandi, 2019; Perdana & Adrianto, 2020; Puspitarini, 2019) state that the current ratio has a positive effect on financial performance. Therefore, the hypothesis is formulated as follows:

H1: Liquidity has a significant positive effect on financial performance.

Leverage describes the extent to which a company is funded by external financing (N. M. B. Purba, 2019). The result of a high leverage ratio will increase the risk borne by the company. This is because the higher the proportion of debt, the higher the risk of the company's inability to meet interest payments or debt repayment in times of economic downturns (Zujeny et al., 2022). Inability to pay will result in costs that the company has to sacrifice to solve this problem (Christian et al., 2018). Therefore, the higher the company's debt, the higher the loan burden to be paid, which will also reduce the company's profit. Previous studies (Amartiya & Minan, 2022; Prabowo & Sutanto, 2019; Wahyuni & Suryakusuma K.H., 2018) state that leverage has a significant negative effect on financial performance. Thus, the hypothesis is formulated as follows:

H2: Leverage has a significant negative effect on financial performance.

Company size reflects the size of the company. Company size is used to see the magnitude of all assets owned by the company in its annual reports. Companies with large amounts of assets can be interpreted as being able to optimize financial performance. Therefore, company size is one of the factors that determine whether a company generates profits. The more assets a company has, the more it can optimize its financial performance. Previous studies (Anggarsari & Aji, 2018; Darmawan et al., 2020; Santini & Baskara, 2018) state that company size has a significant positive effect on financial performance. Thus, the hypothesis is formulated as follows:

H3: Company size has a significant positive effect on financial performance.

Company size can be considered an important factor because investors tend to trust large-scale companies more, as they are believed to be able to obtain larger profits compared to smaller-sized companies, as smaller companies may not achieve large profits according to the investors' objectives. Companies with high liquidity ratios mean that they can settle their short-term debts and convert assets into cash quickly. Thus, larger companies are more trusted than smaller companies. This large company size can strengthen the positive relationship between liquidity and company performance, in line with previous studies (Putri & Munfaqiroh, 2020; Qonita et al., 2022; Sholikhah et al., 2019).

H4: Company size strengthens the significant positive relationship between liquidity and company performance.

The financial performance of a company is influenced by its size. Larger companies tend to have larger assets that management can use to improve the company's performance. Large companies require more capital to continue generating profits. Large companies are more consistent and capable of generating profits compared to smaller companies. The scale of a company can be seen from its total assets (Sayekti & Santoso, 2022). Large assets prove that the company can settle its short-term debts before the due date (Maulina et al., 2023). Companies with significant debt will risk paying off the principal and interest with their earnings, causing a decrease in profits. From this explanation, it can be concluded that

company size greatly influences tax planning as suggested by previous studies (Riani et al., 2019; Setiawan & Suwaidi, 2022; Yuni & Setiawan, 2019).

H5: Company size strengthens the significant negative relationship between leverage and financial performance.

## METHOD

The current study uses a quantitative approach aiming to prove that liquidity, leverage, and firm size as moderating variables affect financial performance. The entire research object and data source are the population (Mardiatmoko, 2020). The research focus is on companies listed in the Jakarta Islamic Index 30 from 2020 to 2022, which includes 44 companies. The research method used is purposive sampling, which means selecting samples based on certain considerations (Dauda et al., 2021). The following are the sample criteria for the research:

- a. Companies listed in the Jakarta Islamic Index 30 from 2020 to 2022.
- b. Financial reports of the companies from 2020 to 2022.
- c. Complete data related to the research variables of the companies.

Based on the research criteria, it was found that two companies, PT. Dayamitra Telekomunikasi Tbk and PT. Buka Lapak Tbk, did not have complete financial reports from 2020 to 2022. Based on the established criteria, 42 companies with a period of 3 years resulted in a total of 126 units of analysis for the research sample from 2020 to 2022. Out of the 126 units of analysis, 12 outliers were found, resulting in a total of 114 units of analysis for this research. Therefore, the conclusion is that out of the 42 sampled companies, there are 114 units of analysis.

This research uses secondary data, which are the financial reports of the companies listed in the Jakarta Islamic Index 30. These reports are published from 2020 to 2022 on the Indonesia Stock Exchange (BEI) or the official company website. The researcher utilized the documentation method to collect data about the variables from records, transcripts, books, newspapers, etc. (Anam, 2018). All the necessary data for the research were recorded.

This research employs quantitative analysis, specifically multiple linear regression analysis. Regression is a data analysis method used to find the relationship between two or more variables. The variables in this study are independent variables, dependent variables, and moderating variables. Multiple linear regression analysis is used due to the presence of four research variables: CR, DER, ROA, and Ln Total Assets. Therefore, the model in this research is as follows:

$$Y = \alpha + \beta_1L + \beta_2Le + \beta_3Up + \beta_4ROA + \beta_5LnTA + e$$

$$FP = \alpha + \beta_1Li - \beta_2Le + \beta_3Up + \beta_4LiUp + \beta_5LeUp + e$$

Where:

FP = Financial Performance

$\alpha$  = Constant

$\beta$  = Regression Coefficient

L = Liquidity

Le = Leverage

Up = Company Size

e = Error

## RESULTS

**Table 1** shows the descriptive statistics of this study with a total of 114 units of analysis. The liquidity variable, measured by the current ratio proxy, has a mean value of 2.49250 and a standard deviation of 1.808449. The lowest value for the liquidity variable is 0.369, while the highest value is 10.375. The second independent variable, leverage, measured by the debt-to-equity ratio (DER) proxy, has a mean value of 0.97787 and a standard deviation of 0.083737. The leverage variable has a higher standard deviation than the mean, indicating poor data quality. The lowest value for the leverage variable is 0.095, and the highest value is 3.291.

**Table 1**

### *Descriptive Statistics*

No	Ratio	N	Minimum	Maximum	Mean	Std. Deviation
1	Liquidity	114	0.369	10.375	2.49250	1.808449
2	Leverage	114	0.095	3.291	0.97787	0.806737
3	Company Size	114	15.665	23.589	17.77071	1.453550
4	Financial Performance	114	-0.030	0.198	0.06131	0.047262

Source: Authors' estimation.

The company size variable, proxied by Ln total assets, has a mean value of 17.77071 and a standard deviation of 1.453550. The lowest value for the company size variable is 15.665, while the highest value is 23.589. The moderating variable, company size, proxied by Ln total assets, has a mean value. The dependent variable, financial performance, proxied by return on assets (ROA), has a mean value of 0.06131 and a standard deviation of 0.047262. The lowest value for the financial performance variable is -0.030, while the highest value is 0.198.

The data analysis method used in this study is multiple regression analysis (MRA) or interaction method (Dewi et al., 2021). This method is employed to evaluate the influence of liquidity and leverage on financial performance, with company size as the moderating variable, in companies listed in the Jakarta Islamic Index 30 (JII 30) from 2020 to 2022. The results of the multiple linear regression analysis conducted in this study can be found in [Table 2](#) and [Table 3](#).

**Table 2***Classical Assumption Test Results*

No	Test	Results	Criteria	Conclusion
1	Normality – One Kolmogorof Smirnof	Asym. Sig (2-tailed) = 0.090	> 0.05	Normally distributed
2	Multicollinearity – VIF	VIF (CR) = 1.326 VIF (DER) = 1.303 VIF (SIZE) = 1.074	VIF < 10	No multicollinearity
3	Heteroskedasticity – White test	Chi square = 14.82	Chi square hitung < Chi Square Tabel 16.918978	No heteroskedasticity
4	Autocorrelation – Durbin Watson	DW = 1.882	1.6427 < DW < 2.2504	No autocorrelation

Source: Authors' estimation.

In [Table 2](#), the significance value of the normality test is 0.090. Therefore, it is concluded that the liquidity, leverage, company size, and financial performance variables are normally distributed as the significance level is greater than 0.05. To test for multicollinearity, the Variance Inflation Factor (VIF) is calculated and found to be less than 10 or the tolerance values are greater than 0.1. Hence, this study does not have multicollinearity issues between the independent variables in the regression equation.

Furthermore, the White test is conducted to determine if there is heteroscedasticity, with the criterion being a significance value greater than 0.05. The conclusion drawn from this study is that there is no heteroscedasticity. From [Table 2](#), it is also noted that there is no autocorrelation among the variables, as the Durbin-Watson test yields a value of 1.882. Therefore, the regression model is deemed appropriate for use ([Mardiatmoko, 2020](#)).

[Table 3](#) presents results of multiple regression test. Based on the data in the table, the following multiple regression analysis equation is obtained:

$$FP = - 0.172 + 0.071Li + 0.081Le + 0.015Up - 0.004LiUp - 0.006LeUp + e$$

**Table 3***Multiple Regression Test Results*

Model	Coefficient	t	Sig	Results	R <sup>2</sup>	F
Konstanta	- 0.172	-1.088	0.279		0.340	12.650 (Sig. 0.000)
Liquidity	0.071	2.151	0.034	Significant		
Leverage	0.081	0.704	0.483	Insignificant		

Model	Coefficient	t	Sig	Results	R <sup>2</sup>	F
Company Size	0.015	1.681	0.096	Insignificant		
Interaction_1	- 0.004	-2.114	0.037	Significant		
Interaction_2	- 0.006	-1.001	0.319	Insignificant		

Source: Authors' estimation.

## DISCUSSION

### The Effect of Liquidity on Financial Performance

Based on the results of the multiple linear regression test, it is found that financial performance is influenced by liquidity and is in line with the hypothesis. The first hypothesis states that liquidity significantly affects financial performance, therefore the first hypothesis is accepted. Refer to table 3 which shows a regression coefficient of 0.071 with a significance value of 0.034, which is smaller than 0.05. This means that high liquidity can explain the financial performance of companies in good condition (Dewi et al., 2021). This study is consistent with signalling theory because a company's liquidity can be used as a signal indicating that liquidity affects financial performance. Companies with high liquidity values indicate that the financial performance of the company is in good condition, and low liquidity values do not necessarily mean that the financial performance of the company is in a bad condition. A high liquidity value indicates that the company has a large placement of funds in current assets. The size of the company's assets provides benefits in meeting short-term obligations. This condition is considered good by management and creditors as it is considered strong. If the management can balance the use of current assets to maintain liquidity while utilizing existing capabilities to obtain profits, profitability will not be affected by the size of liquidity if it is within reasonable limits. This increasing level of liquidity also increases the credibility of the company, resulting in a positive reaction from investors to increase its profitability. Therefore, the conclusion is that liquidity affects the increase in financial performance. This study is similar to previous studies (Dauda et al., 2021; Iman et al., 2021; Santini & Baskara, 2018) stating that liquidity affects financial performance.

### The Effect of Leverage on Financial Performance

Based on the results of the multiple linear regression test, it is found that leverage does not have a significant effect on financial performance and is not in line with the hypothesis. The hypothesis set by the researcher is that leverage has a significant negative effect on financial performance. The test results show a regression coefficient value of 0.081 and a significance value of 0.483, which is greater than 0.05. This means that leverage does not have a significant effect on financial performance. Therefore, the second hypothesis is rejected. This indicates that the level of leverage, whether high or low, does not have an impact on financial performance. When determining the sources of company funds, companies can apply more external sources of funds compared to their own capital or use fewer external sources of funds compared to their own capital. The use of a large amount of external sources of funds

results in a high interest burden that must be borne, which can have a negative impact on financial performance (Mahulae, 2020). The results of this study do not support the signalling theory because leverage cannot be a signal indicating the ability to influence financial performance. Companies with high leverage ratios do not necessarily have poor financial performance, and low leverage ratios do not necessarily indicate good financial performance. Therefore, leverage cannot affect financial performance because companies are not dependent on external sources of funds or finance their operational activities mainly using retained earnings and equity capital (Fatikha & Yudiana, 2021). This view is also supported by previous studies (Muharromi et al., 2021; Puspitarini, 2019; Rizki & Yandri, 2019) stating that leverage does not have a significant effect on financial performance.

### **The Effect of Company Size on Financial Performance**

Based on the results of the multiple linear regression test, it is stated that company size does not have a significant effect on financial performance and is not in line with its hypothesis, therefore hypothesis three is rejected. The test results show a regression coefficient of 0.015 with a significance value of 0.096, which is greater than 0.05. This indicates that the size of the company cannot explain financial performance in both good and bad conditions. This research does not support the signalling theory because company size cannot be used as a signal that can influence financial performance. Company size does not affect the improvement of financial performance because the total assets owned do not operate efficiently and generate high profitability (Tambunan & Prabawani, 2018). Companies with large total assets do not necessarily have large financial capabilities because total assets are the sum of total equity and total debt. If total assets are dominated by debt, the amount of debt has a significant interest cost, which requires retained earnings to pay, resulting in lower financial performance. This insignificant influence is caused by the fact that as the company size increases, the company requires higher costs to carry out its operational activities, thereby reducing its profitability. Optimization in asset management also plays a role in the progress of a company in generating profits. This research is in line with previous studies (Krisnandi, 2019; Santini & Baskara, 2018; Tambunan & Prabawani, 2018).

### **The Effect of Company Size Moderating Liquidity on Financial Performance**

The results of this study support the researcher's hypothesis, where the hypothesis emphasized that company size moderates the influence of liquidity on financial performance. The results can be seen in the table above, which shows a regression coefficient of -0.004 and a significance value of 0.037, where the significance value is smaller than 0.05. This means that company size moderates the negative relationship between liquidity and financial performance. Therefore, the third hypothesis in this study is accepted.

The signalling theory (Spence, 1973) can explain the relationship between company size and financial performance. Financial statements, which include total assets that are used by interested parties to determine the size of the company, serve

as a signal for two different parties. Large companies are relatively more stable and capable of generating profits compared to small companies. The size of a large company can be measured by the amount of its assets, therefore it can be concluded that large companies have a large number of assets, enabling them to utilize their assets to meet their obligations (Amartiya & Minan, 2022). Large companies are generally trusted by external parties according to their respective interests because they are considered more competent in their field. However, large companies often use their assets to pay off their debts, which reduces the amount of assets available for investment. This is because debt utilizes more assets, leaving fewer assets available for investment, which can generate profits and improve the company's financial performance. Therefore, company size can be used as an effort to moderate the negative or weaken the relationship between liquidity and financial performance. The results of this study support the signalling theory (Spence, 1973), which proves that large companies have large assets, and these assets are used, among other things, to meet the company's obligations.

This research proves that the size of the company and the level of liquidity will decrease financial performance because a company with many assets tends to use those assets to pay off its debts. This opinion is also supported by previous studies (Putri & Munfaqiroh, 2020; Qonita et al., 2022; Sholikha et al., 2019) showing that company size moderates the influence of liquidity on financial performance.

### **The Moderating Effect of Company Size on the Relationship between Leverage and Financial Performance**

The findings of this research are not in line with the hypotheses established by the researcher, in which the emphasized hypothesis is that company size moderates the influence of leverage on financial performance. The results of this study can be seen in Table 3 above, which shows a regression coefficient of 0.006 and a significance value of 0.319. The significance value obtained is greater than 0.05. This means that the fourth hypothesis in this study is rejected.

This study is not in line with the signalling theory (Spence, 1973) which cannot explain how company size moderates the influence of leverage on financial performance. With financial reports that include total assets, which are used by parties who need to know the size of the company, it means that the size of the company cannot moderate the relationship between leverage and financial performance. Larger companies will face bigger problems, which will increase operational costs (Amartiya & Minan, 2022). This forces companies to seek external funding in the form of large debts to drive company growth. The more debt a company has, the more it must pay back, including interest, which leads to a decline in financial performance. The use of debt from loans puts companies in a precarious position as management will have difficulty predicting the company's future (Zulhelmy & Sukma, 2022). This has an impact on investors being less interested in investing in such companies. Paying off large obligations can reduce the company's



profit, leading to a decline in financial performance. These financial reports serve as signals for different parties.

The results of the research prove that company size cannot moderate the relationship between leverage and financial performance. A manager of a large-scale company will be more cautious and meticulous in improving financial performance to gain trust in the company. This opinion is also supported by previous studies (Amartiya & Minan, 2022; Dewi et al., 2021; Wati et al., 2019) stating that company size can moderate leverage's influence on financial performance.

## CONCLUSION

There are 5 hypotheses in this study, namely the influence of liquidity on financial performance as H1, the influence of leverage on financial performance as H2, the influence of company size on financial performance as H3, company size moderates the relationship between liquidity and financial performance as H4, and company size moderates the relationship between leverage and financial performance as H5. The analysis results show that 2 hypotheses are accepted with a significance value  $< 0.05$ . On the other hand, H2, H3, and H5 in this study are rejected because they have a significance value  $> 0.05$ . Therefore, it can be concluded empirically that liquidity can significantly improve financial performance and company size moderates the relationship between liquidity and financial performance in companies listed on the Jakarta Islamic Index from 2020 to 2022. However, leverage level, company size, and company size moderating the relationship between leverage and financial performance do not have a significant influence on the financial performance of companies listed on the Jakarta Islamic Index from 2020 to 2022.

This research has limitations in data collection. PT. Bukalapak and PT. Dayamitra Telekomunikasi did not report their financial statements for the year 2020 to the Indonesia Stock Exchange and their company websites. This research also has limitations in the measurement tool used, as the measurement tool used by the researcher does not include companies in the banking sector.

Researchers in the future should use the current ratio measurement tool, which includes financial statements of the banking sector that separate current assets and current liabilities, so that future researchers can use the quick ratio, cash ratio, or inventory-to-equity ratio. The number of years in the population for this study is only three years, so it can be expanded to include more years for a more comprehensive analysis.

The findings of this research can be used by companies listed in the JII 30 to optimize their debt policy, ensuring that the use of external capital does not burden the company. The use of external capital has a positive impact on tax reduction, allowing external financing to provide an alternative for companies to minimize taxes. Companies can improve their financial performance by utilizing external capital, leading to more effective financial performance.

## Author Contributions

Conceptualization	F.I.C., S.B.S., E.H., & E.J.S.	Resources	F.I.C., S.B.S., E.H., & E.J.S.
Data curation	F.I.C., S.B.S., E.H., & E.J.S.	Software	F.I.C., S.B.S., E.H., & E.J.S.
Formal analysis	F.I.C., S.B.S., E.H., & E.J.S.	Supervision	F.I.C., S.B.S., E.H., & E.J.S.
Funding acquisition	F.I.C., S.B.S., E.H., & E.J.S.	Validation	F.I.C., S.B.S., E.H., & E.J.S.
Investigation	F.I.C., S.B.S., E.H., & E.J.S.	Visualization	F.I.C., S.B.S., E.H., & E.J.S.
Methodology	F.I.C., S.B.S., E.H., & E.J.S.	Writing – original draft	F.I.C., S.B.S., E.H., & E.J.S.
Project administration	F.I.C., S.B.S., E.H., & E.J.S.	Writing – review & editing	F.I.C., S.B.S., E.H., & E.J.S.

All authors have read and agreed to the published version of the manuscript.

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The study was approved by Program Studi Akuntansi (S1), Universitas Muhammadiyah Purwokerto, Purwokerto, Indonesia.

## Informed Consent Statement

Informed consent was not required for this study.

## Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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## Conflicts of Interest

The authors declare no conflicts of interest.

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