

The Effect of Leverage Ratio on Company Value with Activity Ratio as a Moderating Variable

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ABSTRACT: The aim of this study is to evaluate the impact of leverage, measured by LDER (Long Term Debt to Equity Ratio), on company value, measured by PER (Price Earning Ratio), involving activity ratio represented by FAT (Fixed Asset Ratio) as a moderating variable in companies listed in the MNC36 index on the Indonesia Stock Exchange (BEI). The research period spans 10 years from 2013 to 2022, utilizing secondary data in the form of financial reports. The research sample is selected using purposive sampling, where 5 companies are chosen as samples with a total of 50 samples at the end of the research period. The analysis method employed is multiple linear regression, and hypothesis testing is conducted using SPSS version 23. The research findings indicate that leverage has a significant positive impact on firm value, while the activity ratio also has a positive and significant effect on firm value. Additionally, the activity ratio can moderate the relationship between leverage and firm value.

KEYWORDS: Leverage (LDER); Company Value (PER); Activity Ratio (FAT); Moderation.

I. INTRODUCTION

Trade and investment are experiencing uncertainty globally, during global uncertainty, the Indonesian economy shows resilience. In 2023, Indonesia's economy will grow by 5.05%, exceeding the government's target of 5%. Growth is driven by strong domestic consumption, rising exports, and stable investment. Inflation due to rising prices has made the Indonesian economy experience challenges, such as high inflation challenges, income inequality, and dependence on imports.

In the current turbulent global economy and competitive industry, corporate value is in the main spotlight, especially for businesspeople, corporate value is used to attract investors. Companies generally have a long-term focus, on increasing the company's value and increasing optimal return on investment for shareholders, as well as near-term targets that involve optimizing benefits with available resources. In this study, the company value indicator used is the Price Earning Ratio, which is the ratio between the stock market price and net profit per share. Based on the PER ratio, the higher the PER, it means that the company is considered to have the prospect of achieving significant profit growth in the future, hence investors are willing to pay a premium for their shares.

In this research, companies listed in the MNC36 index were used for the aspects studied. Because these companies are the best companies on the Indonesia Stock Exchange (IDX) based on certain criteria decided by MNC Group and IDX. The shares of MNC36 companies are included in the category of actively traded stocks, so their prices continue to fluctuate. This provides an opportunity for investors to make stock transactions easily. MNC36 shares have a fairly low risk scale when compared to other stocks on the IDX. This is related to companies listed in the index generally have solid financial conditions with solid financial performance, and promising growth prospects. In fact, it can be said that MNC36 companies have a superior corporate value when compared to the average of other companies on the IDX. However, MNC36 stocks come from a variety of different industry sectors. Thus, every sector has industry risks, such as regulatory changes, fierce competition, or changing consumer trends.

The downward trend in company value is indicated by a decrease in the price earning ratio, according to Pratama and Wiksuana (2016), factors such as company size, leverage, and profitability contribute to company value. Leverage is a ratio used in valuing the assets of a company funded by debt. The growth of a company depends on funding sources, which can be obtained both from inside and outside the company. Funding from within the company is usually sourced from the net profit held by the company. Meanwhile, funding from outside the company or external can be obtained from loans (debt), bond issuance, or through the issuance of shares (equity) which will give rise to a security commonly called leverage. The company conducts funding with the aim of raising capital, which will be used to drive the company's growth and expansion to a wider scale. The leverage in this research is represented by the Long-Term Debt to Equity Ratio (LDER). LDER reflects the company's ability to pay its long-term obligations by being independently funded. The increase in the ratio indicates an increase in the use of capital to finance the

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company's long-term debt. Based on this explanation, companies that could create profits, tend to increase the quantity of debt they have, due to the increase in the amount of interest paid will be adjusted to the profits obtained by the company before taxes are calculated.

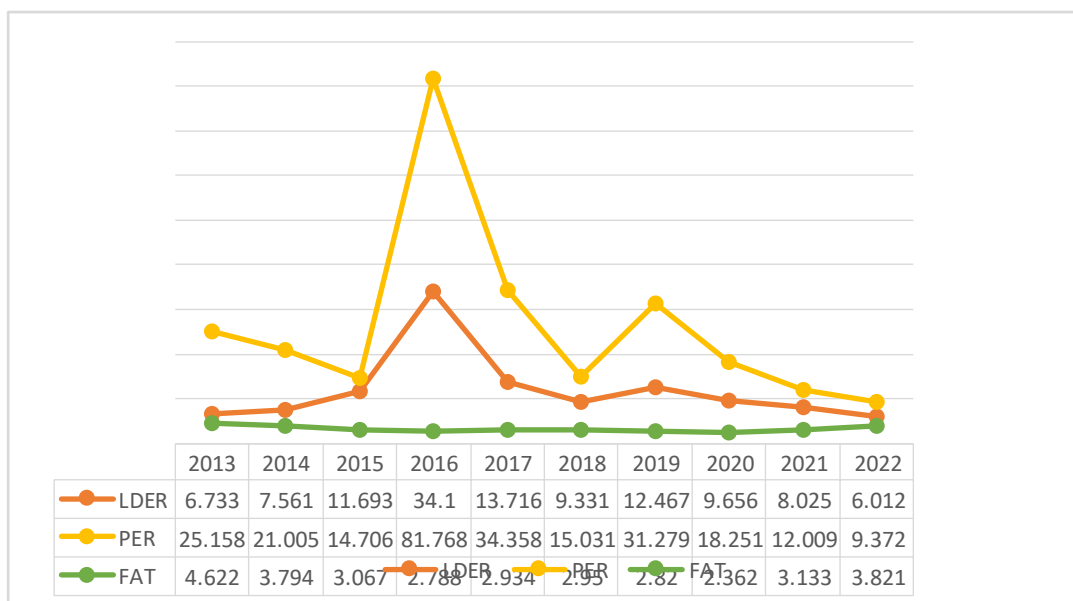


Figure 1. The Average Fluctuations in LDER, PER, and FAT among MNC36 Index Companies on The Indonesian Stock Exchange, Between 2013 and 2022.

The MNC36 index data for 2013 to 2022 suggests that companies' valuations (based on price-to-earnings ratio) and their debt levels (measured by long-term debt to equity ratio) have fluctuated over the past decade. Where in 2016 there was a significant spike, but in 2017 there was a significant decrease, then fluctuated and in 2020 to 2022 experienced a downward trend. The increase and decrease in the value of the company (PER) tends to be followed by the increase and decrease in leverage (LDER) in the same year, except in 2014 and 2015. In the graph above, the reality of the data is contrary to the generally accepted theory, because of the influence created in one direction or positive. Supposedly, the effect of leverage on the value of the company has a non-directional and negative effect.

Research related to the relationship between leverage ratio and company value explained by Arfin Taniman & Jonnardi (2020) who examined the relationship between leverage variables and company value concluded that leverage variables have a significant influence on company value. Research by Dwicahyani et al. (2022) concluded that leverage does not have a significant influence on the value of a company. According to research by Dina & Wahyuningtyas (2022), leverage has a negative effect on the value of the company, this means that companies with high leverage tend to have low company value, and vice versa. According to Tanaya & Wiyanto's (2022) research, the leverage ratio has a positive and significant influence on the company's value.

Previous studies on the effect of leverage ratios on company value have resulted in varied and inconsistent outputs. Indicates that leverage cannot be directly linked to the company's value. This encourages researchers to conduct research with the intention of addressing the gap. Some references point to the activity ratio being indicated to be one of the factors. Research conducted by Ferdiawan et al. (2019) revealed that the activity ratio could moderate the relationship between capital structure and company value. Aramana's (2021) research revealed that TATO (activity ratio) influences DER (leverage). Research conducted by Rifqi & Sitorus (2022) which states that activity affects the capital structure of DER (leverage). The research by Vianti et al. (2023) which states that leverage has a negative and significant effect on the value of the company, the results of the study prove that the higher the company's debt (leverage), the lower the company's value. The research of Selvianah & Hidayat (2022) stated that leverage has a negative effect on the value of the company, Kolamban et al. (2020) produced a study that revealed that leverage has a significant negative effect on the value of the company.

Considering the explanation of some of these relevant references, this study intends to review the effect of leverage ratio on company value, by adding the activity ratio (fixed asset turnover ratio) as a moderation variable in the research model. Empirical Study on MNC36 Index Companies on the IDX in 2013 - 2022. The study intends to analyze the influence of leverage ratio on company value, both direct and indirect relationships or through activity ratios as a moderating factor.

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II. LITERATURE REVIEW

A. Signaling Theory

In accordance with Brigham and Houston (2011:78), signs or signals are steps taken by company management in providing direction to investors about their perspective on the company's future potential. Companies that have the potential to make a profit will try to stay away from selling shares and seek each new fund needed with a different approach, including the use of debt that exceeds the target of a reasonable capital structure.

Meanwhile, based on the signaling theory, companies that can create profits, tend to increase the quantity of their financial obligations, due to the addition of interest repayment will be equalized with profits before taxes are calculated. After that, a logical investor will witness that the increase in the value of the company is derived from the high use of debt. Therefore, investors will apply for strengthening the value of shares following the company's move to buy back shares with funds from debt issuance. Simply put, investors see the burden of liabilities as a signal from the company's valuation.

Then, the Signal theory explains that the activity ratio can affect a company's value by sending signals to investors about the company's management quality, operational efficiency, and prospects, to increase the company's value.

B. Trade-off Theory

In the trade off theory, the use of high leverage has the potential to harm the company's value (Husnan and Pudjiastuti, 2015:282). When a company is in debt, its cost of capital will rise because of the interest that must be paid on the debt. However, this cost of capital is still lower than if the company only used equity, as the interest on the debt is deductible from income tax. Investors reacted positively to the company taking on more debt. This suggests they believe the company will be profitable enough in the future to handle the extra financial burden. The company's qualified capabilities attract investors, trigger an increase in stock prices and have an impact on increasing the company's value. The trade-off theory shows that there is a non-linear relationship between debt and company value. Initially, an increase in debt can increase the value of the company. However, once it reaches the optimal point, the subsequent increase in debt will lower the company's value.

Trade-off Theory also explains the activity ratio, where the activity ratio can affect a company's value by mitigating debt costs, increasing debt attractiveness, and increasing leverage tolerance. Companies with moderate activity and leverage ratios generally have higher and more stable company values.

C. Company Values

Company value is the investor's point of view regarding the scale of the company's achievements. The value of the company is reflected in the value of the stock market, therefore, the rapid surge in stock prices creates the value of the company to soar. The high value of a company can form a market that believes not only in the company's current achievements, but also in its future opportunities. In capital market studies, stock prices and various other indicators are often used as a reference to determine the value of a company, including abnormal returns, stock returns, Price Earning Ratio (PER), ordinary stock prices, and other indicators that present ordinary stock prices in the capital market. (Harmono, 2011:1).

D. Leverage Ratio

The leverage ratio, or debt ratio, is an indicator of how much debt a company involves funding its operations. This ratio measures the proportion of a company's assets that are funded through debt. This means that this ratio plays a role in realizing how much debt is financed by its own capital (Kasmir, 2018: 158). In simple terms, leverage can be interpreted as the amount of debt liability charged by the company if measured by its assets. The higher the leverage ratio, the higher the level of financial volatility of the company. This is because companies along with high leverage have more liabilities to pay, making them more susceptible to fluctuations in income and interest. This ratio shows how much a company relies on long-term borrowing (loans) to fund itself, compared to the money invested by its owners. In other words, it tells you the balance between outside debt and the company's own cash.

E. Activity Ratio

Activity ratio is a ratio used to calculate a company's ability to optimize the use of its resources. This ratio provides a representation of the extent to which a company can manage its assets. Thus, the activity ratio is an important indicator in paying attention to the company's strategy in achieving goals by using the least possible resources to support the company's operational activities. There are several types of activity ratios, including fixed asset turnover which is a ratio to measure the efficiency of a company in using its fixed assets to obtain sales, total asset turnover is a ratio that measures the efficiency of a company in using its assets to obtain income.

F. Hypothesis Development

1. The Effect of Leverage Ratio on Company Value

According to theory, the relationship between leverage and company value is explained through trade off theory. According to this theory, a capital structure that contains more debt will reduce the value of the company. This is due to estimates that the costs of

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financial hardship and agency costs incurred outweigh the tax savings benefits from the use of debt. Based on this argument, the researcher concluded that there is a relationship between leverage and company value.

The leverage ratio indicates the ratio between funds obtained from loans and funds sourced from personal capital in financing the business. Optimization in the company's source of funds can create the company's financial stability. Thus, it can be concluded that leverage is one of the factors that can influence the value of a company. Empirically, the relationship between leverage and company value is explained by Dina and Wahyuningtyas (2022). Examine the effects of profitability, leverage, and company size on company value. The population in this research is companies that are included in the LQ45 group for the period 2018 – 2020 on the Indonesia Stock Exchange. The method of sampling in this research is based on the non-probability sampling method. This study uses descriptive statistical data analysis techniques, classical assumption tests, and multiple linear regression analysis. The output of the research proves that leverage has a negative effect on the value of the company. This means that companies with high leverage tend to have low company values, and vice versa. High leverage increases the risk of a company defaulting on its debts. This can lead to a company defaulting, which can negatively impact the company's value. Investors and creditors will see companies that have a high risk of default as riskier investments, thus lowering the value of the company's stocks and bonds.

The studies that are relevant to the results of the above research are the research conducted by Vianti et al. (2023) which states that leverage has a negative and significant effect on the value of the company, the results of the study prove that the higher the company's debt (leverage), the lower the company's value, the research of Selvianah and Hidayat (2022) states that leverage has a negative effect on the value of the company, Kolamban et al. (2020) produced a study that revealed that leverage has a significant negative effect on the value of the company. The results of this study indicate that companies with large debts have a high risk in repaying their debt costs, this affects investors' interest in investing their funds in the company, a decrease in investor interest will cause the company's value to decline in the future. Rejeki and Haryono (2021) stated that the leverage figure shows negative and significant so that leverage can reduce the company's value. The use of greater leverage can increase the amount of burden and risk that the company must bear. In other words, when leverage increases, the value of the company will decrease. Meanwhile, in the study, Febriani (2020) said that leverage has a significant negative effect on the company's value. The research of Kay et al. (2022) states that leverage has a negative effect on the value of companies, because investors consider companies to use funds sourced from debt more than their own capital. As a result, investors are not interested in investing in the company because they think that companies that have a lot of debt give a lot of money to creditors and in the research of Anugerah and Suryanawa (2019) the results of the analysis show that leverage has a negative and significant effect on the value of the company, which means that the higher the leverage, the lower the value of the company. Based on the explanation related to the influence of leverage on the value of the company, hypothesis 1 can be determined, namely:

H1: The leverage ratio has a negative and significant effect on the value of the company.

2. The Effect of Activity Ratio on Company Value

Based on the trade-off theory, a high activity ratio generally indicates excess inventory increases the risk of obsolescence and losses and will then affect the company's value. Empirically, the relationship between the ratio of activities and company value is explained by (Eko Purwanto, 2020). In the study, the activity ratio was analyzed with factors such as profitability, liquidity, and the ratio of activity to company value. The population used in this study is all non-financial companies listed on the Indonesia Stock Exchange from 2010 to 2017. There are 23 issuers that are the research sample. The sampling technique in this study is based on the stratification method of random sampling. This study uses classical assumption test analysis techniques and multiple linear regression analysis. The results of the study prove that the activity ratio has a negative and significant effect on the company's value. Thus, showing that the company is not using its assets efficiently to generate revenue and profits and the company takes a long time to sell them.

The studies that are relevant to the results of the above research are studies conducted by Kadek and Luh Gede (2022) stating that the ratio of activities has a negative effect on the value of the company, this is because the total sales generated by the company are smaller than the total assets of the company, which provides clues that the company is not efficient in managing its assets so that it can reduce the value of the company. Then Fyfy and Murtanto (2022) stated that the activity ratio does not have a significant positive effect on the company's value, high activity decreases the company's value, which means less effective and efficient asset management over sales, thus causing negative investor sentiment. In a study conducted by Nurfaizah and Pamungkas (2022) stated that the activity ratio had a negative effect on the company's value, then in a study conducted by Dasuha (2023) the activity ratio had a negative and significant influence on the company's value, the research of Mirayanti and Alit Erlina Wati (2023) revealed that the activity ratio had a negative influence on the company's value, this result showed that the level of effectiveness decreased companies in their function of asset management will affect the success rate of the company in maintaining value for capital owners, as well as the research of Nofriyani et al. (2021) stated that activities affect the value of the company partially negatively, meaning that the excessive total asset turnover is not prioritized and the excessive number of assets will have a negative impact on investors so as to reduce the value of the company. and the research by Santi and Sudarsi (2024) revealed that the results of activities have a significant negative effect on the company's value, which means that every change that

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occurs in the activity ratio, the company's value will affect the change. Based on the explanation related to the influence of the activity ratio on the value of the company, hypothesis 2 can be determined, namely:

H2: The ratio of activities has a negative and significant effect on the value of the company.

3. The Effect of Activity Ratio in Moderating the Relationship between Leverage and Company Value

Based on the signaling theory, a high activity ratio can amplify the positive signals provided by high leverage, showing that the company is not only able to take debt risk but also manage its operations efficiently to increase the company's value.

Empirically, the relationship between the activity ratio and the value of the company is explained by Ferdiawan, Dheasey, and Aziz (2019). To examine the influence of capital structure, liquidity, profitability, and company size on the value of the company with the total asset turnover ratio as a moderation variable in automotive and component companies listed on the Indonesia Stock Exchange for the period 2013-2017. The sampling technique uses purposive sampling. Based on the sample criteria that have been set, a sample of 10 companies was obtained. This research was carried out with a period of 5 years, so that the total sample of this research was 50 companies. The data analysis techniques used are multiple linear regression analysis techniques and moderation regression analysis (MRA). The results of the study stated that the activity ratio was able to moderate all variables to the company's value. This could indicate that the company is more focused on operational efficiency than on the use of high leverage. Thus, the activity ratio can serve as a signal to the market regarding the company's strategy in managing its assets and operational performance.

The relevant and supportive studies with the results of the above research are previous studies that can be seen from the influence of activity ratio on leverage and the effect of activity ratio on company value. The effect of the activity ratio on leverage is emphasized by the Aramana (2021) study which revealed that partially TATO (activity ratio) influences DER (leverage), in a study conducted by Rifqi & Sitorus (2022) which stated that activity partially affects the DER capital structure (leverage). This shows that the increase in activity (TATO) in managing all assets owned is very efficient to generate sales so that it does not require external funds or debt financing from outside parties to fulfill the company's sales. A study by Mirayanti and Alit Erlina Wati (2023) highlights the link between a company's activity ratio and its value. Their research found that a lower activity ratio is associated with a decrease in company value. This suggests that companies that are not efficiently using their assets are less successful at creating value for their owners (investors), as well as the study by Nofriyani et al. (2021) found that being too busy (high asset turnover) can hurt a company's value. This is because investors do not like companies holding onto more assets than they need. Extra assets tie up resources and can make it harder for a company to be profitable, then a study by Dasuha (2023) suggests that a company's efficiency in using its assets (measured by the activity ratio) can hurt the company's value, and this negative effect is statistically important, two studies investigated the relationship between a company's activity ratio and its value. Nurfaizah and Pamungkas (2022) found a negative association, meaning higher activity ratios were linked to lower company values. In contrast, Fyfyh and Murtanto (2022) did not find a clear positive effect, suggesting the activity ratio might not directly influence company value. Based on the explanation along with several references related to the influence of the activity ratio on leverage and the company's value, hypothesis 3 can be determined, namely:

H3: The activity ratio moderates the leverage relationship to the company's value.

III. RESEARCH METHODOLOGY

A. Population and Sample

The population in this research is companies that are members of the MNC36 index, the period 2013 – 2022, which is found on the Indonesia Stock Exchange (IDX) as many as 105 companies. The sample in the study was 5 companies obtained using a purposive sampling technique that met the criteria, with non-probability sampling, with criteria; (1) Companies listed in the MNC36 Index for 2013 – 2022; (2) Companies that were not delisted in 2013 – 2022 in the MNC36 Index; (3) Companies whose financial ratio data is complete during 2013 – 2022. Thus, the observation data is 50 observation data.

The data acquisition in this research uses the method of library study and documentation study, the library study is carried out by carrying out analysis on journal literature and related sources and the documentation study on this method can be said to be a study on financial data that has been published, collected, and analyzed. Then the data that has been collected is then reviewed and analyzed to produce valid research conclusions.

B. Variabel Operations

In this research, the dependent variable is the company's value, which is proxied by the Price Earning Ratio (PER), which is the comparison between the market price per share and the earnings per share (Hikmat et al. 2019). The independent variable, namely the leverage ratio that is proxied to the Long-Term Debt to Equity Ratio (LDER), is the comparison between long term debt and equity, (Sukma et al. 2022). The moderation variable in this research is the ratio of activities that are proxied to the fixed asset turnover ratio, which is the comparison between sales and net fixed assets (Puspita et al. 2021).

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C. Data Analysis Methods

Descriptive statistical analysis summarizes the data by showing mean values, standard deviations, maximums, and minimums. Inferential analysis, including classical assumption test, multivariate regression, and hypothesis test.

Classical Assumption Test

Based on finding violations of classical assumptions, normality, multicollinearity, autocorrelation, and heteroscedasticity are examined (Ghozali, 2016).

1. Normality Test

The function of the normality test is to determine whether the data in the variables to be used in the study have a normal distribution or not.

2. Multicollinearity Test

The importance of conducting a multicollinearity test is to determine whether there are independent variables that correlate with each other in a model. If the independent variables have a high similarity, then the correlation will be very strong (Sujarweni, 2016:230). According to Ghozali (2016), the existence of multicollinearity can be identified through the level of tolerance value and Variance Inflation Factor (VIF). If the tolerance value ≥ 0.10 or $VIF \leq 10$, then multicollinearity can be said to be non-existent (Ghozali, 2016).

3. Autocorrelation Test

The autocorrelation test in a model determines whether there is a correlation between the disturbance variable in a certain period and the previous variable. Autocorrelation is common in time series data, but rare in cross-section sample data because the perturbing variables are usually different from each other. Detecting autocorrelation by comparing Durbin Watson values with Durbin Watson tables (d_l and d_u) (Sujarweni, 2016:231). The criteria are:

Table 1. Autocorrelation Criteria

Information	Results	If
There was no positive autocorrelation relationship	Rejected	$0 < d < d_l$
There was no positive autocorrelation relationship	No decision	$d_l \leq d \leq d_u$
There was no negative autocorrelation	Rejected	$4 - d_l < d < 4$
There was no negative autocorrelation	No decision	$4 - d_u \leq d \leq 4 - d_l$
There is no positive or negative autocorrelation	Accepted	$d_u < d < 4 - d_u$

4. Heteroscedasticity Test

The heteroscedasticity test aims to evaluate whether there is a variance inconsistency of the remnants of regression between one observation and another observation (Ghozali, 2018:137). If the variation of the remainder between one observation to another is fixed, it is called homoscedasticity, whereas if the variation is different, it is called Heteroscedasticity. According to Ghozali (2018:137), an effective regression model is one that shows homoskedasticity and does not experience heteroscedasticity.

Multivariate Regression

The use of regression is intended to understand whether there is a relationship between dependent variables and independent variables simultaneously to find out the magnitude and direction of the independent variable sign. This analysis is used to understand how much the effect of the independent variable, namely leverage (X_1), on its bound variable, namely Company Value (Y). The analysis of this regression involves the use of SPSS version 23 software with the regression equation:

$$PER = \alpha + \beta_1 LDER + e$$

$$PER = \alpha + \beta_1 LDER + \beta_2 FAT + e$$

$$PER = \alpha + \beta_1 LDER + \beta_2 FAT + \beta_3 LDER * FAT + e$$

Explanation:

α : Konstanta

$\beta_1 \beta_2 \beta_3$: Variable regression coefficients

e : Residual value

PER : Price Earning Ratio

LDER : Long Term Debt to Equity Ratio

FAT : Fixed Assets Turnover

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Hypothesis Test

The statistical t test is used to test how each independent variable individually affects its bound variable. Where this is done by comparing the calculated t-value with the t-value of the table obtained from the degree of freedom $df = n - k$ with a significance level of 5%, where $k = 2$ (two-sided testing) with the same requirements as the hypothetical conditions:

Hypothesis 1 and 2

Ho: There is no negative and significant effect on the company's value

Ha: There is a negative and significant influence on the value of the company

Hypothesis 3

Ho: Activity ratio does not moderate the relationship of leverage to company value

Ha: The activity ratio moderates the leverage relationship to the Company's Value

Criterion:

1. If $t \text{ counts} > t \text{ table}$ or $-t \text{ counts} < -t \text{ table}$, then Ho is rejected, and Ha is accepted.
2. If $t \text{ counts} \leq t \text{ table}$, Ho is accepted, and Ha is rejected

IV. RESULTS AND DISCUSSION

A. Descriptive Statistical Analysis

Statistical descriptive analysis provides an overview of the research data from the mean value, standard deviation, maximum value, and minimum value of the three research variables whose results are known as follows:

Table 2. Descriptive Statistics

	Std. Deviation	Minimum	Maximum	Mean
LDER	19,814	0,397	138,471	11,489
FAT	3,229	0,722	5,779	3,229
PER	26,294	3,327	331,875	26,294

Source: Data processed using SPSS 23 (2024)

According to the data listed in Table 2, LDER has an average of 11,489, which indicates that companies in the MNC36 Index have an average leverage of 1148.9% of their models. This shows that companies in the MNC36 Index tend to use significant amounts of debt in their operations. The LDER value range between 0.397 to 138.471 indicates a high variation in the use of debt by these companies.

The data in Table 2 indicates that the FAT value has an average of 3.229 which means that the activity ratio of companies in the MNC36 Index generates Rp3.229 in revenue from every Rp1 of fixed assets they own during a one-year period, and from the maximum and minimum data it can be seen that the lowest FAT value of companies in the MNC36 Index is 0.722 and the highest is 5.779 based on assets owned in one accounting period.

Based on the data in Table 2, it shows that the average value of companies in the MNC36 Index is 26,294, which means that the average market appreciates the value of shares 2629.4% of the price per share set by the company. These results show that companies in the MNC36 Index in 2013 - 2022 generally have a high corporate value. The minimum value of 3,327 and a maximum of 331,875 indicates that the value of companies in the MNC36 index is very diverse. Some companies have very low company values and others only have very high company values.

B. Inferential Statistical Analysis

Classical Assumption Test

1. Normality Test

Table 3. One Sample Kolmogorov Smirnov 1

		Unstandardized Residual
N		50
Normal Parameters ^{a,b}	Mean	.0000000

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Std. Deviation	18.84146814
Most Extreme Differences Absolute	.125
Positive	.125
Negative	-.074
Test Statistic	.125
Asymp. Sig. (2-tailed)	.050 ^c

Source: Data processed using SPSS 23 (2024)

Based on the results of the normality test with the Kolmogorov Smirnov one-sample test using SPSS, a significant value of Asymp. Sig. (2-tailed) of 0.050. The data that is declared to pass the kolmogorov smirnov test if it has a significant value greater than 0.05 Then the data has been declared as data that is not normally distributed where $0.050 = 0.05$.

Table 4. One Sample Kolmogorov Smirnov 2

		Unstandardized Residual
N		50
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	18.84146814
Most Extreme Differences	Absolute	.125
	Positive	.125
	Negative	-.074
Test Statistic		.125
Asymp. Sig. (2-tailed)		.050 ^c
Monte Carlo Sig. (2-Sig. tailed)		.392 ^d
	99% Confidence Interval	
	Lower Bound	.380
	Upper Bound	.405

Source: Data processed using SPSS 23 (2024)

The model is declared free of multicollinearity if it has a Tolerance value of ≥ 0.1 or equal to a VIF value of ≤ 10 (Ghozali, 2016). The results of the value calculation in Table 4 above show that all independent and moderation variables have a Tolerance value above 0.1 and a VIF value below 10. Therefore, it can be concluded that there is no multicollinearity in the relationship between LDER and FAT variables in the regression model.

2. Multicollinearity Test

Table 5. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	LDER	.824	1.214
	FAT	.824	1.214

Source: Data processed using SPSS 23 (2024)

The model is declared free of multicollinearity if it has a Tolerance value of ≥ 0.1 or equal to a VIF value of ≤ 10 (Ghozali, 2016). The results of the value calculation in Table 5 above show that all independent and moderation variables have a Tolerance value above 0.1 and a VIF value below 10. Therefore, it can be concluded that there is no multicollinearity in the relationship between LDER and FAT variables in the regression model.

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3. Autocorrelation Test

Table 6. Durbin Watson Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.081 ^a	.007	-.036	49.494734	2.033

Source: Data processed using SPSS 23 (2024)

Based on the requirements of the autocorrelation test to determine if there's a relationship between observations at different time points in the data, the $dU < dW < 4-dU$, from the Durbin Watson table data it is known that the dL value is 1.6283, the dU value is 1.4625, and the $4-dU$ value is 2.5375. The dW value is 2.033 with $(k) = 2$, and the sum of the observation data is 50 ($n = 50$). If the value of $du < dW < 4-du$ is reached, then the regression model does not undergo autocorrelation, according to the Durbin-Watson test criteria. In this investigation, the autocorrelation test produced the following results: $dU (1.4625) < dW (2.033) < 4-dU (2.5375)$. These findings suggest that regression models have no autocorrelation.

4. Heteroscedasticity Test

Table 7. Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.370	.116		3.198	.002
Long Term Debt to Equity Ratio	-.002	.002	-.139	-.871	.388
Fixed Asset Turnover	-.021	.029	-.114	-.713	.479

a. Dependent Variable: ABS_RES

Source: Data processed using SPSS 23 (2024) Multivariate Regression Result

Based on the results shown in Table 7, where the significance value of LDER is 0.388. Meanwhile, the significance value of FAT is 0.479. There was a significance level of > 0.05 for both variables. Thus, it can be said that there are no signs of heteroscedasticity in the final regression model.

If based on the classical assumption test, it can be concluded that the data in the study is normally distributed. Therefore, this study has qualified to conduct multiple regression analysis tests. Regression model used:

Table 8. Regression Equation Output 1

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.682	3.371		.202	.841
	LDER	2.229	.148	.908	15.032	.000

Dependent Variable: PER

Source: Data processed using SPSS 23 (2024)

Equation 1 (Model 1)

$$PER = a + \beta_1 LDER + e$$

$$PER = 0,682 + 2,229 LDER + e$$

Table 9. Regression Equation Output 2

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-13.179	8.349		-1.579	.121

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LDER	2.359	.162	.961	14.591	.000
FAT	3.832	2.121	.119	1.807	.077

Dependent Variable: PER

Source: Data processed using SPSS 23 (2024)

Equation 2 (Model 2)

$$PER = a + \beta_1 LDER + \beta_2 FAT + e$$

$$PER = -13,179 + 2,359 LDER + 3,832 FAT + e$$

Table 10. Regression Equation Output 3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-13.469	7.706		-1.748	.087
	LDER	2.787	.206	1.135	13.559	.000
	FAT	5.907	2.074	.183	2.848	.007
	FAT_LDER	-.470	.155	-.228	-3.029	.004

Dependent Variable: PER

Source: Data processed using SPSS 23 (2024)

Equation 3 (Model 3)

$$PER = a + \beta_1 LDER + \beta_2 FAT + \beta_3 LDER * FAT + e$$

$$PER = -13,469 + 2,787 LDER + 5,907 FAT - 0,470 LDER * FAT + e$$

Hypothesis Test Result

1. The effect of leverage ratio on company value

The results of the analysis show that the t-value of LDER (13.559) > t table (2.00247) and has a significant value of 0.000 < 0.05, so it can be concluded that the leverage ratio (LDER) has a significant effect on the company's value (PER). With a regression coefficient (2.787), it shows that the direction of the leverage ratio (LDER) has a positive effect on the company's value (PER). Thus hypothesis 1 about the leverage ratio that has a negative and significant effect on the value of the company can be rejected, (Table 8).

Based on the results of the analysis conducted in this study, it can be seen that the research findings show that the use of debt (leverage) actually has a significant positive relationship with the company's value. This is contrary to the initial hypothesis and trade-off theory that underlies this research. The current finding contradicts past research where Vianti and Fauzi (2023) suggested a negative impact, indicating that leverage weakens company value, Studies by Selvianah and Hidayat (2022) and Anggraeni (2020) both found that using debt (leverage) tends to decrease a company's overall value. In other words, research suggests a negative relationship between a company's reliance on debt and its perceived worth.

This study aligns with previous research by Sawitri and Artini (2022) who found a positive and important link between a company's leverage ratio and its value. This suggests the company is effectively using debt to finance its activities, demonstrating confidence in its future growth potential, the research by Santa Dwipa et al. (2020) suggests that using debt financing (leverage) can actually boost a company's value. This is because taking on more debt can be seen as a sign of confidence in the company's ability to grow revenue and profits in the future, allowing them to invest more and potentially achieve those goals. Several studies have found a positive link between a company's leverage and its value. For example, Taniman and Jonnardi (2020) and Dewi and Abundanti (2019) both show that higher leverage is associated with a significant increase in company value. In other words, these studies suggest that companies can boost their value by taking on more debt. Despite having a high debt ratio, the companies in this study showed good ability in managing their financial risks. This prompted the market to give a positive assessment of the company, thus reinforcing the positive relationship between leverage and company value, which is more in line with the signaling theory.

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2. Effect of activity ratio on company value

The results of the analysis show that the t-value of the FAT activity ratio (2.848) > t table (2.00247) and has a significant value of $0.007 < 0.05$, so it can be concluded that the activity ratio (FAT) has a significant effect on the company's value (PER). With a regression coefficient (5.907), it shows the direction of the positive activity ratio (FAT) to the value of the company (PER). Thus, hypothesis 2 about the ratio of activities that have a negative and significant effect on the value of the company is rejected, (Table 9).

Based on the results of the analysis conducted in this study, it can be seen that the research findings show that the activity ratio has a significant positive relationship with the value of the company, this finding is in line with the signaling theory, where a high activity ratio shows the efficiency of the company in managing its assets, thereby increasing the attractiveness for investors and having implications for an increase in the value of the company. This result is also different from previous research which showed a negative relationship between the activity ratio and company value conducted by Kadek and Luh Gede (2022) stating that the activity ratio had a negative effect on company value, then Fyfly and Murtanto (2022) stated that the activity ratio did not have a significant positive effect on company value, in a study conducted by Nurfaizah and Pamungkas (2022) stated that the activity ratio had an effect negative on the company's value, and then in the research conducted by Dasuha (2023) the activity ratio has a negative and significant influence on the company's value.

The output of the analysis is in line with the analysis carried out by Noviyanti and Ruslim (2021) which stated that the activity ratio has a positive and significant influence on the company's value, a positive response from investors can affect the level of the company's stock price. The findings of this study show that a high ratio of activities, such as a rapid turnover of inventory and receivables, significantly increases the value of a company. This shows that the activity ratio is an important indicator of financial health and company performance that investors need to consider in making investment decisions.

3. The effect of activity ratio in moderating the relationship between leverage ratio and company value

The results of the analysis show that the t-value of the moderation variable (-3.029) < t table (-2.00247) and has a significant value of $0.004 < 0.05$, so it can be concluded that the activity ratio (FAT) moderation variable has a significant effect on the company's value (PER). With a regression coefficient (-0.470) indicating the direction of the negative moderation variable moderating the relationship between the leverage ratio to the company's value (PER). Thus hypothesis 3 on the ratio of activities that can moderate the relationship between the leverage ratio and the value of the company is acceptable, (Table 10).

Based on the output of the review carried out in this study, it can be seen that the activity ratio can affect the relationship between the leverage ratio and the value of the company, in line with the trade off theory. So, hypothesis 3 is recognized. The output of this analysis is in contrast to the analysis carried out by Anniza and Suwaidi (2023) which reveals that the activity ratio does not moderate the relationship between the leverage ratio and the company's value, which means that the company's activities can be affected by the company's realization on the fulfillment of each of its debts. If the company is not qualified to handle the company's activities, it can have an impact on the company's ability to pay its debts. This means that the company has a high threat, resulting in investors being less interested in the company.

This finding aligns with a previous study by Ferdiawan, Dheasey, and Aziz (2019). Their research showed that a company's activity level can influence how debt (leverage) affects its overall value. This situation can be done by mitigating the risk of high leverage, increasing investor confidence, and increasing competitiveness. A company with a moderate ratio of activity and leverage generally has a higher and stable company value.

CONCLUSIONS

Leverage has a positive and significant relationship with the value of companies in the MNC36 index companies in 2013 – 2022. So, even though it has a high debt ratio, the companies in this study show good ability in managing their financial risks. The activity ratio has a significant positive relationship with the value of companies in the MNC36 index companies in 2013 – 2022. This condition shows that the activity ratio is an important indicator of financial health and company performance that investors need to consider in making investment decisions. The activity ratio can moderate the relationship between the leverage ratio and the value of the company. In this case, the variable activity ratio mitigates the risk of high leverage, increases investor confidence, and increases competitiveness. Companies with moderate activity and leverage ratios typically have higher and stable company values.

This study has several limitations including a) The researcher uses research subjects whose scope is narrow, because of which the output of this study is not representative of a wider group of subjects, b) The independent variables contained in this study are only leverage variables, while in terms of influencing the value of the company there are many factors such as capital structure, liquidity, company size, profitability and so on. Subsequent research is expected: (1) to include other variables other than leverage variables that may affect the value of the company; (2) expanding the scope of research to several other indices.

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