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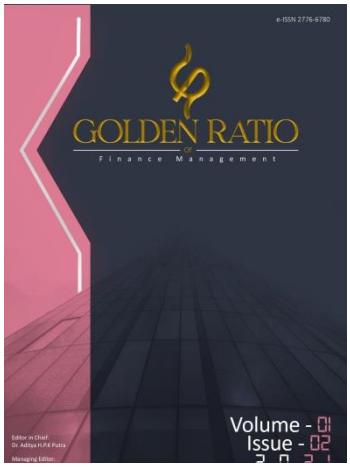

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FINANCE | RESEARCH ARTICLE

Quantitative Analysis of Leverage Ratio on Earning-Per-Share of Property and Real Estate Sectors in Indonesia

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Abstract: Objectiveness of our study is expected to provide the several contributions: (1) Theoretical benefits, the results of this study are expected to contribute to the development of economics, especially financial science, as material for developing insight into financial performance through operating leverage and financial leverage on earnings per share (EPS). This research was conducted on the Indonesia Stock Exchange (IDX). The research time taken in carrying out and completing this activity is scheduled for 3 (three) months, from July to September 2020. The population in this study is the property and real estate sector companies listed on the Indonesia Stock Exchange (IDX) from 2017-2019, totaling 62 companies. The method of determining the sample in this study use purposive sampling. The result of this study shown operating leverage has a positive and significant effect on earnings per share, financial leverage has no effect and is not significant on EPS, operating leverage and financial leverage simultaneously have a positive and significant effect on earnings per share. Based on the results of our demonstration of the analysis and discussion, several suggestions are put forward e.g., before investing in any company, an investor needs to pay attention to the level of earnings per share.

Keywords: Financial Leverage, Operating Leverage, Earnings per share, Financial Management
JEL Classification Code: E6, F65, I22

1. INTRODUCTION

The Indonesia Stock Exchange (IDX) is one of the fastest-growing stock exchanges; it can be seen that the number of stock exchange members listed for the last three years continues to increase, such as in 2014, there were 509 stock exchange members, an increase in 2015 as many as 525 companies, and in 2016 the number of stock exchange member companies was 539 companies. it can also be seen from the change in market capitalization, which continues to grow from year to year. There are nine sectors on IDX i.e., agriculture, mining, basic industry, chemicals, various industries, consumer goods industry, property, real estate, building construction, infrastructure, utilities, transportation, finance, and trade, services, and investment. Stocks have become an attractive alternative for investors for their investments and are among the most popular financial market instruments. Stores have added options for local investors, who previously only invested their money in banking institutions (Mazur et al., 2021). The increasing competition today requires every company to adapt to the circumstances that occur and needs every company to be able to manage the functions that exist within the company so that they can be superior in the competition they face. The company needs funds to run its business, regardless of the business that the company runs in each of its operational activities. It always utilizes the resources and sources of funds it has optimally to increase growth and maintain business viability by inflating its value (Alarussi & Alhaderi, 2018; X. Zhang & Wang, 2020; Y. Zhang et al., 2020). states that the fulfillment of these funds comes from internal sources (internal sources) and external sources (external sources). Funds originating from internal sources are funds formed or generated by the company, namely retained earnings and depreciation. Funds obtained from external sources are funds from creditors, owners,

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and participants in the company. Capital from creditors is debt for the company concerned, which is often referred to as foreign capital.

Property is one sector that is very important for human life. In carrying out their daily activities, humans cannot be separated from this sector. The most important thing is the house or apartment where they live. Property, especially housing, is a housing need that is one of the basic (primary) human needs and needs for food and clothing, so everyone must relate to this property sector (Ahmad et al., 2020). This sector is highly dependent on economic conditions. After the banking sector, this sector is most affected if interest rates rise (Goldblum & Wong, 2000). An increase in interest rates in a country can encourage the transfer of funds from a currency with a low-interest rate to a currency with a higher interest rate. Business capital is the central aspect of running and developing a company. Currently, the company uses a source of funds in the form of capital used to meet short-term costs and long-term costs; these costs will cause leverage. Leverage is defined as using sources of funds in the company's operational activities to cover fixed costs or pay off fixed costs (Mihaiu & Opreana, 2013; Tahir et al., 2020). In carrying out all its business, the company requires strength from funds by increasing assets and fulfilling obligations that must be borne. The company's financial management usually uses three types of leverage: financial leverage, operating leverage, and combination leverage (Chen & Zhao, 2006). In this study, only two leverages were used, namely financial leverage and operating leverage. First, financial leverage is the use of company assets and sources of funds by companies that have fixed costs intending to increase shareholder profits (Chen & Zhao, 2006; Chakraborty et al., 2004). A company is said to be doing financial leverage if it uses external sources of funds from the company in the form of debt, so the company must bear the fixed costs that have been charged to the deficit. Second, operating leverage is an increase in funding from production costs to total operating costs at various sales volume levels (Akob et al., 2020). A company that experiences or performs operating leverage if in its operations the entity uses fixed assets to bear the fixed costs of the company's operations (Grau & Reig, 2021).

According to McEnroe & Mindak (2020), earnings per share (EPS) is a form of income from the sale of goods and services obtained by the company to be given to shareholders, or it can be said that the income is generated from each share it owns. EPS is the most widely used indicator. To assess the profitability of a company. EPS is a tool used to measure the company's performance in a certain period seen from the point of view of common stockholders. Based on the results of previous research conducted by Sausan et al (2020), state financial leverage positively affects earnings per share. In contrast, operating power does not affect earnings per share, and financial leverage and operating leverage simultaneously positively affect earnings per share. Meanwhile, according to Fathur Rohman et al (2019), the results of research and discussion in this study show that partially operating leverage does not affect earnings per share. Fixed assets in property and real estate companies usually use land and buildings as the main objects, but land and buildings cannot be used as cash in a short time, so the company cannot pay off debt quickly using fixed assets in the form of land and buildings (Kumasi et al., 2019). This study by Fathur Rohman et al (2019) focus on discussing financial leverage and operating leverage that affect EPS. These two variables are related to the source of funds and fixed expenses for the company's operational activities that will affect EPS. Objectively this study addresses several main studies e.g., Does Operating leverage, financial leverage and operating leverage have positive and significant effects on earnings per share in property and real estate sector companies listed on the IDX.

Some of the studies related to this research e.g. Fathur Rohman et al (2019) state operating leverage has no effect on earnings per share, besides, financial leverage also has no impact on earnings per share, and combination of that leverage also has no effect on earnings per share. Furthermore, research by Georgescu Iuliana (2014) state financial leverage has a positive effect on earnings per share. At the same time, operating leverage does not affect earnings per Share, and financial leverage and operating leverage simultaneously positively impact earnings per share. In addition, there is a study by Bukit (2013), state operating leverage (OL) has a significant positive effect on profitability, while financial leverage (FL) has a significant adverse impact on the profitability. Objectiveness of our study is expected to provide the several contribution: (1) Theoretical benefits, the results of this study are expected to contribute to the development of economics, especially financial science, as material for developing insight into financial performance

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through Operating leverage and Financial leverage on earnings per share (EPS). This is because further research with the same problem, different variables, and a more extended period related to earnings per share (EPS) can be considered for further investigation. (2) for managerial implications for investors and the community as a source of information and assist investors and the public in conducting investment activities in the property and real estate sectors.

2. Literature Review

According to Salikin et al (2014); Arcilla et al (2013), "Financial management is a matter of investment as the allocation of funds, the problem of obtaining funds, and how to manage funds to create and increase the value of benefits for the company." According to Svetlana Saksonova (2014), "Financial management can be defined as good fund management related to the allocation of funds in various forms of investment or spending efficiently. The use of too high debt will endanger the company because the company will be included in extreme leverage. Namely, the company is trapped in a high level of debt. It is difficult to release the debt burden. Therefore, the company should balance how much debt is worth taking and where are the sources that can be used to pay the debt (Dottori & Manna, 2015). According to Kulmala et al (2002), "The use of assets with fixed costs that aim to generate sufficient income to cover fixed and variable costs and can increase profitability." The definition of operating leverage according to Vo (2019) operating leverage is the company's ability to use fixed operating costs to increase the effect of changes in sales volume on earnings before interest and taxes (EBIT). Therefore, it can be said, the Degree of Operating leverage (DOL) for the company is high (Novy-Marx, 2011). Small changes in sales will result in increased (more sensitive) changes in revenue. If the company has a high Degree of Operating leverage, a high level of sales will generate increased revenue. Operating leverage as a tool to measure changes in operating profit as a result of changes in sales so that companies can find out the company's operating profits (Marn & Rosiello, 1992; Huefner & Largay III, 2008)

Operating leverage occurs when the company uses assets that incur fixed costs or expenses. Operating leverage works in two directions, which can increase company profits or increase losses company (Sarkar & Zhang, 2020). Sarkar & Zhang (2020) states that if a company has high operating leverage, then a slight increase in sales can boost a large percentage of EBIT. Conversely, if the company has low operating leverage, a decrease in sales will cause a disproportionate reduction in EBIT. Fixed operating costs are incurred to generate revenue that is greater than all fixed and variable operating costs (Goldstein et al., 2001). The effect arising from fixed operational costs is a change in sales volume that results in changes in operating profits or losses that are greater than the proportion that has been set. Set. Operating leverage can also show the effect of revenue or sales on the company's operating profit (Goldstein et al., 2001). Knowing the level of operating leverage, management can estimate changes in operating profit due to changes in sales. This indicates that operating power is related to company sales and earnings before interest and taxes (Kaplan, 1989). Operating leverage can measure changes in income or sales of the company's operating profits. Judging from the usefulness of operating leverage, the company can find out differences in operating profit due to changes in sales so that companies can find out the company's operating profits—leverage (DOL). Dol is the ability of a company's EBIT in responding to sales fluctuations (Purba & Septian, 2019).

Financial leverage occurs due to the use of sources of funds originating from debt, causing the company to have to bear the obligation and be burdened by interest costs. According to (Braojos-Gomez et al., 2015), financial leverage is as a potential use of fixed financial costs to increase the effect of changes in earnings before interest and taxes on EPS. According to Yang et al (2016) state the use of sources of funds that have a fixed burden with the assumption that it will provide additional profits that are greater than the fixed burden so that it will increase the profits available to shareholders. Financial leverage arises because of fixed financial charges that the company must issue. Companies using funds with fixed costs are said to produce favorable financial leverage or a positive effect if the income received from these funds is greater than the fixed expenses from the use of these funds (Bae et al., 2017). On the other hand, financial leverage is detrimental (unfavorable leverage) if the company cannot obtain income from using these funds as much as a fixed burden to

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be paid (Bae et al., 2017). The description explains that financial leverage is the use of funds with a fixed expense in the hope that it will provide benefits that will increase earnings per share. The use of loan capital is carried out if the funding needs can no longer be met using own capital or a lack of available money. The use of loan capital will affect the level of risk faced and the company's cost of capital. Simultaneously and partially, financial leverage has a significant effect on earnings per share. Financial leverage can be measured using the degree of financial leverage (DFL). DFL can be interpreted as the effect of changes in EBIT on income (profit) Degree of financial leverage (DFL) (Al-Slehat, 2020; Gatsi et al., 2013). According to Bukit (2013), earning per share is a ratio that shows how much the ability of each share to generate profits. In another book, Earning per share is a ratio that describes the amount of rupiah earned for each share of common stock. So, it can be concluded that earning per share is a ratio that shows the size of the ability of each share to get the profits for the shareholders. Therefore, company management, common shareholders, and potential shareholders are very interested in earnings per share. Therefore, earning per share is an indicator of the company's success.

The earnings per share ratio, also called the book value ratio, is a ratio to measure the success of management in achieving profits for shareholders. An easy ratio means that the administration has not succeeded in satisfying shareholders; on the contrary, with a high ratio, the welfare of shareholders increases (Irjayanti & Azis, 2012). The profit for shareholders is the amount of profit after tax. According to Jung et al (2017), earning per share is a ratio to measure the success of management in achieving profits for shareholders. A low ratio means that the administration has not succeeded in satisfying shareholders; on the contrary, with a high percentage, the welfare of shareholders increases. In other words, a high rate of return. Earning-per share and a measure of company profitability, which is the basis for determining company goals and as a basis for consideration of potential investors in making decisions. The relationship between each variable can be described in the conceptual framework and hypothesis displayed in Table 1.

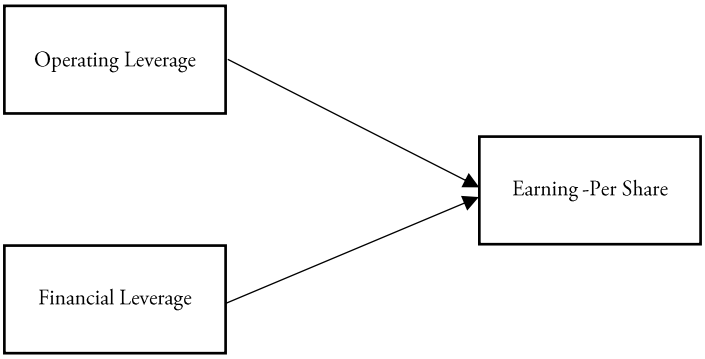

Figure 1: Conceptual Framework

H1: Operating leverage has a positive effect on earnings per share (EPS) of property and real estate sector companies listed on the IDX

H2: Financial leverage has a positive effect on earnings per share (EPS) of property and real estate sector companies listed on the IDX

H3: Operating leverage and financial leverage simultaneously have a significant effect on earnings Per Share (EPS) of property and real estate sector companies listed on the IDX.

3. Research Method and Materials

3.1. Sample Criteria

This study uses a quantitative approach to determine the relationship between two or more variables (Garson, 2016). In addition, this study aims to assess the effect of the independent variable, namely Operating leverage, and financial leverage, on the dependent variable, namely Earning Per Share. This research was conducted on the Indonesia Stock Exchange (IDX). The

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research time taken in carrying out and completing this activity is scheduled for 3 (three) months, namely from July to September 2020. The population in this study is the property and real estate sector companies listed on the Indonesia Stock Exchange (IDX) from 2017-2019, totaling 62 companies. The method of determining the sample in this study use purposive sampling. Purposive sampling is a sampling technique with specific considerations (Hair, 2011). Several samples. The criteria used are as follows in Table 1 and firm samples displayed in Table 2.

Table 1: Samples Criteria

No	Information	Companies
1	The main companies in the property and real estate sector listed on the IDX for the period 2017-2019	62
2	Property and real estate sector companies that do not publish annual reports and audited annual reports 2017-2019	(35)
3	Property and real estate sector companies that do not disclose data related to research variables	(15)
Total Samples		12

3.2. Measurement

The data collection method used in this research is to use quantitative data. Quantitative data is data in the form of numbers. Quantitative data used in this study are Operating leverage, financial leverage, and earnings-per share (EPS). The Source of data used in this study is secondary data. Secondary data is not recorded and collected by researchers but is carried out by other parties. The secondary data in this study were obtained from www.IDX.co.id.

Table 2: Samples

No	Firms	Code
1	PT Agung Podomoro Land Tbk	APLN
2	PT Alam Sutera Realty Tbk	ASRI
3	PT Bekasi Asri Pemula Tbk	BAPA
4	PT Bekasi Fajar Industrial Estate	BEST
5	PT Ciputra Development Tbk	CTRA
6	PT Intiland Develpoment Tbk	DILD
7	PT Megapolitan Development	EMDE
8	PT Perdana Gapura Prima Tbk	GPRA
9	PT Greenwood Sejahtera Tbk	GWSA
10	PT Jaya Real Property Tbk	JRPT
11	PT Lippo Karawaci Tbk	LPKR
12	PT Metropolitan Land Tbk	MTLA

The first phase in the testing phase is the classical assumption test (e.g., normality test, multicollinearity test, and multi-heteroscedasticity). This normality test aims to test whether the dependent and independent variables in the regression model have a normal distribution. Normality testing in this study uses the One-Sample Kolmogorov-Smirnov test. In the Kolmogorov-Smirnov test, data is normal if it has a significant assumption of more than 0.05 and vice versa (Lukman et al., 2018).

The multicollinearity test aims to test whether there is a correlation between the independent variables in the regression model. A good regression model should not correlate with the independent variables (Ghozali, 2013). Multicollinearity occurs in multiple regression analysis if the independent variables are correlated with each other, which can be seen from the tolerance value and its opposite Variance Inflation Factor (VIF). This measure shows which other independent variables explain independent variables. The cut-off value commonly used to indicate multicollinearity is the tolerance value < 0.10 or the same as the VIF value > 10 (Gujarati & Gujarati, 2017). The heteroscedasticity test aims to test whether there is an inequality of variance in the regression model from the residual of one observation to another observation. If the variance and residual from one statement to another observation remain, it is called Homoscedasticity, while a good model is Homoscedasticity. Several test methods can be used, namely the Park Test, Glejser Test, and see the regression graph pattern and the Spearmen correlation coefficient test. In this

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study, the Glejser test was used. The Glejser test was carried out by regressing the absolute value of the residual to the independent variable (Ghozali, 2011).

Furthermore, the second phase in this testing phase is the data analysis method used, i.e., (1) Descriptive Statistical Analysis. Descriptive statistics function to describe or provide an overview of the object under study through sample or population data as it is without analyzing and making generally accepted conclusions. (2) Inferential Statistical Analysis, inferential statistics is a statistical technique used to analyze sample data, and the results are applied to the population. This statistic will be suitable for use if the sample is taken from a clear population, and the sampling technique from that population is done randomly. The type of inferential statistics used in this study is multiple regression analysis. This study uses multiple linear regression analysis to determine the direction of the relationship between the independent variable and the dependent variable, whether positive or negative, and to predict the value of the dependent variable if the value of the independent variable increases or decreases. In this study, the variables used are operating leverage (X1) and financial leverage (X2) as independent variables on earnings per share (Y) as the dependent variable.

$$\mathbf{Y = a + b_1 X_1 + b_2 X_2 + e}$$

Info:

Y	= Earning-Per Share
X_1	= Operating leverage
X_2	= Financial leverage
a	= Constant
$b_1 - b_2$	= Regression coefficient
e	= Error

The third phase in the testing phase of this study is a testing hypothesis; hypothesis testing is carried out using (1) t-test. The t-test essentially shows how far the influence of one independent variable or explanatory variable individually in explaining the independent variable (Ghozali, 2013). The significance test of the coefficient (βi) was carried out with the t-statistic (student-t). This was done to test the regression coefficient of the independent variable partially. But first, the classical assumption test is carried out. The hypothesis is carried out as follows by assessing the t-calculated value > the t-estimated value. Next, the fourth phase is the Simultaneous Test (F-calculated Test). The F-test was conducted to determine whether all independent variables in the regression model have a simultaneous effect on the dependent variable. The decision-making criteria for the F-test calculate the significance value of F-calculated <0.05. The fifth phase is testing the value-adjusted Determination coefficient (R^2). The coefficient of determination test is carried out to determine how much the independent variable can explain the dependent variable. The value of the coefficient of determination is 0 to 1. A small matter of Adjusted R^2 means the ability of the independent variables to explain the variation of the dependent variable is minimal. The value of Adjusted R^2, which is close to 1, means that the independent variables provide almost all the information needed to predict the variation of the dependent variable (Ghozali, 2013).

4. Results and Discussion

4.1. Statistics Analysis

The normality test aims to test whether the data from each research variable is normally distributed or not. This test was carried out using the Kolmogorov-Smirnov (K-S) statistical test. The data is normally distributed if the sig value > 0.05. Based on table 3 shows that the Kolmogorov-Smirnov value with the Asymp. sig (2-tailed) value of 0.200 which is greater than 0.05 so that it can be said that the data is normally distributed.

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Table 3: Normality Test

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		36
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	21.70173816
Most Extreme Differences	Absolute	.110
	Positive	.110
	Negative	-.101
Test Statistic		.110
Asymp. Sig. (2-tailed)		.200[c,d]

Multicollinearity test is used to test whether in the regression model there is a correlation between variables or not. If the tolerance value is > 0.1 and VIF < 10, then the data is declared to have no multicollinearity problem. Based on table 3, it is known that the tolerance value of the Operating leverage (X_1) and Financial-leverage (X_2) variables is 0.714, which is more significant than 0.10. The VIF value of the Operating leverage (X_1) and Financial-leverage (X_2) variables is 1.401 less than 10.00. So, there is no multicollinearity problem. The heteroscedasticity test aims to test whether there is an inequality of variance from the residuals of one observer to another observer in the regression model. If the variance of the residuals from one observer to another is constant, then it is called homoscedasticity, and if it is different. It is called heteroscedasticity. If the sig value > 0.05, there is no heteroscedasticity problem, and vice versa. The heteroscedasticity test used in this study was carried out with the glejser test. This glejser test proposes to regress the absolute value of the residual on the independent variable. Table 3 shows that the independent variable, namely Operating leverage, has a sig value of 0.124 > 0.05, and the Financial leverage variable has a sig value of 0.068 > 0.05. Thus, all independent variables are free from heteroscedasticity problems.

Table 3: Multicollinearity Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.991	8.376		-.118	.907		
	DOL	16.108	3.142	.644	5.126	.000	.714	1.401
	DFL	11.823	6.442	.231	1.835	.075	.714	1.401

a. Dependent Variable: EPS

Descriptive statistics provide a general description of the research object that is sampled. The explanation of the data through descriptive statistics is expected to give an initial picture of the problem being studied. The data on the output of IBM SPSS version 23 shows the amount of data studied (N) is 36 data. Of the 36 data can be explained as follows in Table 4.

1) Earning-per share (Y), based on table 4, shows that the minimum value in the Earning per share variable measured using a ranking classification is 12 in the property and real estate sector. Manufacturing companies from 2017 to 2019, and the maximum value is 97.22. These results indicate that the EPS in the sample in this study ranges from -43.84 to 97.22. with a mean value of 35. 5617 and a standard deviation of 35.57134.
2) Operating leverage (X1), based on table 4, shows that the minimum value in the Operating leverage variable measured using a rating classification is 12 for manufacturing companies in the property and real estate sector from 2017 to 2019 and a maximum value of 4.95. These results indicate that the operating leverage in the sample in this study ranges from -2.97 to 4.95. with a mean value of 1.2625 and a standard deviation of 1.42325.
3) Financial leverage (X2), based on table 4, shows that the minimum value in the financial leverage variable as measured using a ranking classification is 12 in the property and real estate sector Manufacturing companies in 2017 to 2019 the maximum value is 2.97. These results indicate that the amount of financial leverage in the sample in this study ranges from 0.35 to 2.97. with a mean value of 1.3717 and a standard deviation of 69426.

This study uses multiple linear regression analysis, which is used to determine the direction of the relationship between the independent variable and the dependent variable, whether positive or negative, and to predict the value of the dependent variable if the value of the independent variable

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increases or decreases. In this study, the variables used are operating leverage (X_1) and financial leverage (X_2) as independent variables on Earnings per share (Y) as the dependent variable.

Table 4: Descriptive Statistical Analysis Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
DOL	36	-2.97	4.95	1.2625	1.42325
DFL	36	.35	2.97	1.3717	.69426
EPS	36	-43.84	97.22	35.5617	35.57134
Valid N (listwise)	36				

The results of multiple linear regression based on data processing using IBM SPSS 23 are presented in Table 5.

Table 5: Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.991	8.376		-.118	.907
	DOL	16.108	3.142	.644	5.126	.000
	DFL	11.823	6.442	.231	1.835	.075
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27802.409	2	13901.205	27.830	.000b
	Residual	16483.790	33	499.509		
	Total	44286.200	35			
Model		R	R-Square	Adjusted R-Square	Std. Error of the Estimate	
1		.792a	.628	.605	22.34969	

a. Dependent Variable: EPS

Based on table 5, a regression equation can be formulated to determine the effect of Operating leverage and financial leverage on earnings per share as follows:

$$Y = abX_1 + 2X_2 + e$$
$$Y = -0.991 + 16.108\ X_1 + 11.823\ X_2$$

This model shows displayed in Table 5 that the regression coefficient is operating leverage (X_1) and financial leverage (X_2) are positive. These results illustrate a positive relationship between operating leverage and financial-leverage on earnings per share, which means that the increasing operating power and financial influence will increase earnings per share. So it can be concluded that the operating leverage variable (X_1) has a positive regression coefficient of 16.108 which means that if the operating leverage increases by 1%, earnings per share will increase by 16.108% when other variables do not change (constant). The financial leverage variable (X_2) has a positive regression coefficient of 11.823 which means that if Financial-leverage increases by 1%, Earnings per share will increase by 11.823% when other variables do not change (constant). Then the multiple regression coefficients for a constant is -0.991, meaning that when the Operating leverage and Financial-leverage variables are equal to zero (0), the earning per share is .991%.

Hypothesis testing is a test to prove the existence of a relationship between the variables in this study. Hypothesis testing aims to find out the quick answer to the problem is still presumption because it still has to be proven true according to the temporary opinion expressed by the researcher. The F-test is used to test the effect of the independent variables consisting of operating leverage (X1) and financial-leverage (X_2) simultaneously. Based on table 5, where the F-calculated value is 27.830 with df1 and df2 = 2.33, the F-estimated value is 3.285. This value can be searched in Ms. Excel by typing in an empty cell =FINV (0.05,2,33) and entering. Therefore F-calculated 27.830 is more significant than F-estimated = 3.285, so with a degree of error of 5% (α = 0.05), Ha is accepted, Ho is rejected (hypothesis is accepted) and with a significant value of 0.000 <0.05. This means that with a 95% confidence level, it can be said that the assessment of operating leverage (X_1) and financial leverage (X_2) simultaneously has a significant effect on Earning per share (Y) in property and real estate companies listed on IDX. The t-test aims to determine the impact of the

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independent variables consisting of operating leverage (X_1) and financial-leverage (X_2) partially affect earnings per share (Y). Two-party testing criteria are performed if t-calculated > t-estimated, then Ho is rejected, and Ha is accepted, at a significant level = 0.05 and degrees of freedom (df). To find out the t-estimated value with a considerable level of = 0.05 and degrees of freedom (df) = 33, the t-estimated obtained in the appendix is 2.035. This value can be searched in Ms. Excel by typing in an empty cell = TINV (0.05,33) then enter. The following is a table of partial test results of the study.

Based on table 5, it can be seen that the results of data processing contained in the table obtained t-calculated for each independent variable, namely DOL of 5.126 and DFL of 1.835. The research results on the assessment of operating leverage (X_1) on Earning per share (Y) obtained data that t-calculated 5.126 is more significant than t-estimated 2.035. At an error rate of 5%, Ho is rejected, and Ha is accepted (hypothesis accepted) and with a considerable value of 0.000 <0.05 means significant. So, it can be said that operating leverage (X1) partially has a positive and significant effect on Earning per share (Y). Impact of financial leverage (DFL) on earnings per share. The study results on financial-leverage (X2) on earnings per share (Y) obtained data that t-calculated 1.835 is more diminutive than t-calculated = 2.035. At an error rate of 5%, Ho is accepted, and Ha is rejected (hypothesis is rejected) and with a significant value of 0.075 > 0.05, means not effective. So, it can be said that financial-leverage (X2) partially has no effect and is not significant on Earning per share (Y). Table 5 shows the results of R2 that is equal to 0.628 or 62.8% of the amount of earning per share, which is influenced by the Operating leverage variable and financial-leverage variable. In comparison, 37.2% of earnings per share is influenced by variables outside the research conducted.

4.2. Discussion

Operating leverage is how much-fixed costs are used in the operations of a company. Operating leverage works in two directions; that is, it can increase its profits or increase its losses. The operating leverage ratio is proxied by the Degree of operating leverage (DOL). Based on the results of the multiple linear regression analysis that has been carried out. It shows that operating leverage has a (positive) effect on earnings per share in property and real estate manufacturing companies listed on IDX, which means that the increased operating leverage will increase earnings per share. Share, and vice versa. Based on the results of partial hypothesis testing (t-test), the operating leverage variable in this study had a significant influence on Earning per share in property and real estate manufacturing companies listed on the IDX. So the hypothesis in this study which states operating leverage has an effect on significant positive on Earnings per share in property and real estate manufacturing companies listed on the Indonesia Stock Exchange, the hypothesis is accepted. This happens because the increase in DOL means that, on the other hand, it also increases the value of net income, which means increasing the value of sales and operating profits of the company. Companies whose sales increase will encourage an increase in profits, showing the company's operations are healthy and good. Investors will like this. Rational investors will, of course, choose to invest in companies with high operating leverage. It will encourage an increase in earnings per share, encouraging an increase in operating profit that investors will receive. The results of this study are following the results of previous research conducted by (Sarkar & Zhang, 2020), which showed that partially operating leverage had a significant effect on earnings per share. Still, it was different from the research results conducted by Fathur Rohman et al (2019), which showed that operating leverage did not affect. To Earnings per share. Financial leverage is the use of funds with a fixed load in the hope of providing profits that will increase earnings per share. The financial leverage ratio is proxied by the Degree of financial leverage (DFL). Based on the results of the multiple linear regression analysis that has been carried out. It shows that financial leverage does not affect Earning per share in the property and real estate sector manufacturing companies listed on the IDX, which means that the lower the financial leverage, the lower Earning per share. Vice versa. Based on the results of partial hypothesis testing (t-test), the financial leverage variable partially does not affect. It is not significant on Earnings per share in property and real estate manufacturing companies listed on the Indonesia Stock Exchange. So the hypothesis in this study which states that financial leverage

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has a significant positive effect on regarding earnings per share in property and real estate sector manufacturing companies listed on the Indonesia Stock Exchange, the hypothesis is rejected. This happens because there are different views on the value of DFL. Some investors think that the higher the DFL reflects the high level of corporate debt, thereby increasing the risk that investors receive due to the debt interest burden borne by the company. Seeing this causes investors to tend not to invest in the company so that there is a decrease in stock prices which in turn has an impact on the decline in the company's financial leverage. On the other hand, investors with different views argue that debt is urgently needed to increase the company's operational capital. Furthermore, if its use is optimized by the company, such as managing assets, it can increase sales. The increase in sales resulted in a high profit for the company so that the information would receive a positive response from investors, which increased demand for company shares (Lee et al., 2013). The results of this study are following the results of previous research conducted by Fathur Rohman et al (2019), which shows that the financial leverage ratio variable has no significant effect on earnings per share. Still, it is different from (Tahir et al., 2020) research, which shows that financial leverage positively and significantly affects earnings per share.

Operating leverage and financial leverage are financial ratios used to measure the financial performance of a company. Based on the results of the multiple linear regression analysis that has been carried out. It shows that operating leverage and financial leverage affect Earning per share in the property and real estate sector manufacturing companies listed on the IDX, which means that the higher the operating leverage and financial leverage, the higher earnings per-share, and vice versa. Based on the results of simultaneous hypothesis testing (F-test), the operating leverage and financial leverage variables in this study had a significant effect on earnings per share in property and real estate manufacturing companies listed on IDX. So, the hypothesis in this study states operating leverage and financial leverage affects Earning per share in property and real estate sector, the hypothesis is accepted. A good appraisal will attract investors to buy shares, the stock price will increase, and investors' returns will also increase. The results of this study are following the results of previous research conducted by Sarkar & Zhang (2020), which showed that simultaneously operating leverage, Financial leverage, and significant effect on earnings per share. But different from the research results conducted by Andrews et al (2021), which showed that simultaneously operating leverage and financial leverage have no positive effect on earnings per share. Based on the research sample obtained from the analysis conducted to determine the impact of operating leverage and financial leverage on earnings per share in property and real estate sector companies listed on the Indonesian stock exchange, it can be concluded that e.g., Based on the results of data analysis, it is stated that operating leverage has a positive and significant effect on Earning per share on property and real estate companies listed on the Indonesian stock exchange for the 2017-2019 period. Based on the results of data analysis, it is stated that financial leverage has no effect and is not significant on Earning per share in property and real estate companies. Based on the results of data analysis, it is stated that operating leverage and financial leverage simultaneously have a positive and significant effect on Earning per share in property and real estate companies listed on the Indonesian stock exchange for the 2017-2019 period.

5. Conclusion

Based on the results of our demonstration of the analysis and discussion, several suggestions are put forward, namely: (1) For investors, before investing in any company, an investor needs to pay attention to the level of Earning per share (EPS) owned by the company. When investors are afraid of future risks, they also need to pay attention to the use of debt on earnings per share to avoid the risk of losses on their investment. (2) For companies, this research can help companies plan for funding the company's operational activities through operating leverage and financial leverage. Earnings per share can also maintain shareholders' confidence to stay in share ownership to obtain a profit following expectations. So, companies are advised to keep company value through debt by paying attention to EPS because it becomes a reference for investors in choosing shares to stay in share ownership to obtain. Suppose a profit is in line with expectations. In that case, the company is advised to maintain the company's value through the use of debt by paying attention to EPS because it becomes a reference for investors in choosing company shares. (3) For further researchers,

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the results of this study can be used as teaching materials in adding insight, and it is hoped that this research will contribute, a reference for further researchers related to financial management about the influence of operating leverage and financial leverage on earning per share

References

Ahmad, F., Mustapa, Z., Ilyas, B., & Halim Perdana Kusuma, A. (2020). Relationship of TQM on Managerial Perfomance: Evidence From Property Sector in Indonesia. Journal of Distribution Science, *18*(1), 47–57. https://doi.org/10.15722/jds.17.12.20201.47

Akob, M., Arianty, R., & Putra, A. H. P. K. (2020). The mediating role of distribution Kahns engagement: An empirical evidence of salesforce in Indonesia. Journal of Asian Finance, Economics and Business, 7(2), 249–260. https://doi.org/10.13106/jafeb.2020.vol7.no2.249

Al-Slehat, Z. A. F. (2020). Impact of Financial Leverage, Size and Assets Structure on Firm Value: Evidence from Industrial Sector, Jordan. International Business Research, 13(1), 109–120. http://dx.doi.org/10.5539/ibr.v13n1p109

Alarussi, A. S., & Alhaderi, S. M. (2018). Factors affecting profitability in Malaysia. Journal of Economic Studies. 45(3), 442-458. https://doi.org/10.1108/JES-05-2017-0124

Andrews, D. S., Fainshmidt, S., Gaur, A., & Parente, R. (2021). Configuring knowledge connectivity and strategy conditions for foreign subsidiary innovation. Long Range Planning, April 2020, 102089. https://doi.org/10.1016/j.lrp.2021.102089

Arcilla, M., Calvo-Manzano, J. A., & San Feliu, T. (2013). Building an IT service catalog in a small company as the main input for the IT financial management. Computer Standards & Interfaces, 36(1), 42–53. http://dx.doi.org/10.1016/j.csi.2013.07.003

Bae, J., Kim, S.-J., & Oh, H. (2017). Taming polysemous signals: The role of marketing intensity on the relationship between financial leverage and firm performance. Review of Financial Economics, 33(1), 29–40. https://doi.org/10.1016/j.rfe.2016.12.002

Braojos-Gomez, J., Benitez-Amado, J., & Javier Llorens-Montes, F. (2015). How do small firms learn to develop a social media competence? International Journal of Information Management. https://doi.org/10.1016/j.ijinfomgt.2015.04.003

Bukit, I. N. H. (2013). The Effect of Price to Book Value (PBV), Dividend Payout Ratio (DPR), Return on Equity (ROE), Return on Asset (ROA), and Earning Per Share (EPS) Toward Stock Return of LQ 45 for the Period of 2006-2011. Review of Integrative Business and Economics Research, 2(2), 22.

Chakraborty, S. K., Kurien, V., Singh, J., Athreya, M., Maira, A., Aga, A., Gupta, A. K., & Khandwalla, P. N. (2004). Management paradigms beyond profit maximization. Vikalpa, 29(3), 97–118.

Chen, L., & Zhao, X. (2006). On the relation between the market-to-book ratio, growth opportunity, and leverage ratio. Finance Research Letters, 3(4), 253–266. http://dx.doi.org/10.1016/j.frl.2006.06.003

Dottori, D., & Manna, M. (2015). WITHDRAWN: Strategy And Tactics In Public Debt Management. Journal of Policy Modeling. https://doi.org/10.1016/j.jpolmod.2015.12.004

Fathur Rohman, Y., Nurhayati, S. F., & Harun, M. H. (2019). Analisis Pengaruh Earning Per Share (EPS), Price To Earning Ratio (PER), Return On Asset (ROA), Debt To Equity Ratio (Der) Terhadap Harga Saham Pada Jakarta Islamic Indexs (Jii) Tahun 2017-2018. Universitas Muhammadiyah Surakarta.

Garson, G. D. (2016). Partial Least Squares: Regression and Structural Equation Models. Statistical Associates Publishers. https://doi.org/ISBN-13: 978-1-62638-039-4

Gatsi, J. G., Gadzo, S. G., & Akoto, R. K. (2013). Degree of financial and operating leverage and profitability of insurance firms in Ghana. International Business and Management, 7(2), 57–65. http://dx.doi.org/10.3968/j.ibm.1923842820130702.1060

Georgescu Iuliana, et al. (2014). ScienceDirect Fair value accounting and market reaction: evidence from Romanian listed companies. Procedia -Social and Behavioral Sciences, 143, 827–831. https://doi.org/10.1016/j.sbspro.2014.07.484

Ghozali, I. (2013). Aplikasi Analisis Multivariate Dengan Program IBM dan SPSS. In aplikasi analisis multivariate dengan program ibm spss 19 (p. 113). https://doi.org/10.2307/1579941

Goldblum, C., & Wong, T.-C. (2000). Growth, crisis and spatial change: a study of haphazard urbanisation in Jakarta, Indonesia. Land Use Policy, 17(1), 29–37. http://dx.doi.org/10.1016/S0264-8377(99)00043-5

Goldstein, R., Ju, N., & Leland, H. (2001). An EBIT-based model of dynamic capital structure. The Journal of Business, 74(4), 483–512. http://dx.doi.org/10.2139/ssrn.136716

Grau, A., & Reig, A. (2021). Operating leverage and profitability of SMEs: agri-food industry in Europe. Small Business Economics, 57(1), 221–242. https://link.springer.com/article/10.1007/s11187-019-00294-y

Gujarati, D., & Gujarati, D. (2017). Panel Data Regression Models. In Econometrics. https://doi.org/10.1007/978-1-137-37502-5_17

Hair, J. F. (2011). Multivariate Data Analysis: An Overview. In International Encyclopedia of Statistical Science

https://doi.org/10.52970/grfm.v1i2.58

Website: https://goldenratio.id/index.php/grfm ISSN [Online]: 27766780

(pp. 904–907). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-04898-2_395

Huefner, R. J., & Largay III, J. A. (2008). The role of accounting information in revenue management. Business Horizons, 51(3), 245–255. http://dx.doi.org/10.1016/j.bushor.2008.01.013

Irjayanti, M., & Azis, A. M. (2012). Barrier Factors and Potential Solutions for Indonesian SMEs. Procedia Economics and Finance, 4, 3–12. https://doi.org/https://doi.org/10.1016/S2212-5671(12)00315-2

Jung, S., Lee, J. D., Hwang, W. S., & Yeo, Y. (2017). Growth versus equity: A CGE analysis for effects of factor-biased technical progress on economic growth and employment. Economic Modelling, 60(October 2016), 424–438. https://doi.org/10.1016/j.econmod.2016.10.014

Kaplan, S. (1989). The effects of management buyouts on operating performance and value. Journal of Financial Economics, 24(2), 217–254. https://doi.org/10.1016/0304-405X(89)90047-0

Kulmala, H. I., Paranko, J., & Uusi-Rauva, E. (2002). The role of cost management in network relationships. International Journal of Production Economics, 79(1), 33–43. http://dx.doi.org/10.1016/S0925-5273(00)00061-X

Kumasi, T. C., Agbemor, B. D., & Burr, P. (2019). Rural water asset management practices in Ghana: the gaps and needs. Water and Environment Journal, 33(2), 252–264. https://doi.org/10.1111/wej.12396

Lee, E. M., Park, S.-Y., & Lee, H. J. (2013). Employee perception of CSR activities: Its antecedents and consequences. Journal of Business Research, 66(10), 1716–1724. https://doi.org/10.1016/J.JBUSRES.2012.11.008

Lukman, A. F., Adebimpe, O., Onate, C. A., Ogundokun, R. O., Gbadamosi, B., & O. Oluwayemi, M. (2018). Data on expenditure, revenue, and economic growth in Nigeria. Data in Brief, 20, 1704–1709. https://doi.org/10.1016/j.dib.2018.08.191

Marn, M. V, & Rosiello, R. L. (1992). Managing price, gaining profit. McKinsey Quarterly, 18.

Mazur, M., Dang, M., & Vega, M. (2021). COVID-19 and the march 2020 stock market crash. Evidence from S&P1500. Finance Research Letters, 38, 101690. https://dx.doi.org/10.1016%2Fj.frl.2020.101690

McEnroe, J. E., & Mindak, M. (2020). An empirical analysis of an application of an alternative measurement model on international accounting standard 33, earnings per share. Accounting Research Journal. https://www.x-mol.com/paperRedirect/1360335784524419072

Mihaiu, D. M., & Opreana, A. (2013). The Analysis of the Relationship between the Level of the Public Expenditure for Investments and de Degree of Development of the Society in Romania. Procedia Economics and Finance, 6(13), 654–661. https://doi.org/10.1016/s2212-5671(13)00185-8

Novy-Marx, R. (2011). Operating leverage. Review of Finance, 15(1), 103–134. https://doi.org/10.1093/rof/rfq019

Purba, J. H. V., & Septian, M. R. (2019). Analysis of Short Term Financial Performance: A Case Study of an Energy Service Provider. Journal of Accounting Research, Organization and Economics, 2(2), 113–122. https://doi.org/10.24815/jaroe.v2i2.14632

Salikin, N., Ab Wahab, N., & Muhammad, I. (2014). Strengths and weaknesses among Malaysian SMEs: Financial management perspectives. Procedia-Social and Behavioral Sciences, 129, 334–340. http://dx.doi.org/10.1016/j.sbspro.2014.03.685

Sarkar, S., & Zhang, C. (2020). Investment and financing decisions with learning-curve technology. Journal of Banking & Finance, 121, 105967. https://doi.org/https://doi.org/10.1016/j.jbankfin.2020.105967

Sausan, F. R., Korawijayanti, L., & Ciptaningtias, A. F. (2020). The Effect of Return on Asset (ROA), Debt to Equity Ratio (DER), Earning per Share (EPS), Total Asset Turnover (TATO) and Exchange Rate on Stock Return of Property and Real Estate Companies at Indonesia Stock Exchange Period 2012-2017. Ilomata International Journal of Tax and Accounting, 1(2), 103–114. https://doi.org/10.52728/ijtc.v1i2.66

Svetlana Saksonova. (2014). The Role of Net Interest Margin in Improving Banks' Asset Structure and Assessing the Stability and Efficiency of their Operations. Procedia - Social and Behavioral Sciences, 150, 132–141.

Tahir, H., Rahman, M., & Masri, R. (2020). Do Board Traits Influence Firms' Dividend Payout Policy? Evidence from Malaysia. The Journal of Asian Finance, Economics and Business, 7(3), 87–99. http://dx.doi.org/10.13106/jafeb.2020.vol7.no3.87

Vo, X. V. (2019). Leverage and corporate investment–Evidence from Vietnam. Finance Research Letters, 28, 1–5. http://dx.doi.org/10.1016/j.frl.2018.03.005

Yang, R., Xia, K., & Wen, H. (2016). Venture capital, financial leverage and enterprise performance. Procedia Computer Science, 91, 114–121. https://doi.org/10.1016/j.procs.2016.07.048

Zhang, X., & Wang, Z. (2020). Marketization vs. market chase: Insights from implicit government guarantees. International Review of Economics and Finance, 69(October 2019), 435–455. https://doi.org/10.1016/j.iref.2020.06.021

Zhang, Y., Uchida, K., & Dong, L. (2020). External financing and earnings management: Evidence from international data. Research in International Business and Finance, 54, 101275. https://doi.org/https://doi.org/10.1016/j.ribaf.2020.101275