THE EFFECT OF CAPITAL STRUCTURE ON PROFITABILITY IN ANIMAL FEED SUB-SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

Husnul Khatima[1], M. Ikhwan Maulana Haeruddin[2], Anwar[3], Romansyah Sahabuddin[4], Burhanuddin[5]

[1,2,3)]Management, Faculty of Economics and Business, Makassar State University

e-mail: [1)]husnulkhatima317@gmail.com, [2)]ikhwan.maulana@unm.ac.id, [3)]anwar@unm.ac.id, [4)]romansyah@unm.ac.id, [5)]dr.burhanuddin@unm.ac.id

Abstract

This study aims to determine the effect of capital structure on profitability in animal feed sub-sector companies listed on the Indonesian stock exchange. This type of research is Quantitative Descriptive. This study uses the independent variable capital structure, which is proxied by the ratio of debt to equity or Debt To Equity Ratio (DER). The dependent variable is profitability. Profitability is calculated using the Return On Equity (ROE) ratio. The data used is secondary data derived from the financial statements of animal feed sub-sector companies listed on the Indonesia Stock Exchange in 2014-2021. Samples were taken using the saturated sample method, in order to obtain a sample that met the requirements of 4 companies. The data analysis technique used is simple linear regression with hypothesis testing using the t statistical test, besides that a classic assumption test is also carried out which includes linearity tests, normality tests, and autocorrelation tests. The results of the analysis show that capital structure (DER) has a negative and significant effect on profitability (ROE) in animal feed sub-sector companies listed on the Indonesia Stock Exchange, this negative direction means that the greater the DER value owned by a company identified with total debt, the lower the profitability (ROE) value obtained by the company. The predictive ability of the DER variable on ROE is 23.8% as shown by R Square of 23.8%, while the remaining 76.2% is influenced by other factors not examined.

***Keywords**: Capital Structure, Profitability*

INTRODUCTION

In the current era of revolution 4.0, to be able to compete and survive in rapid economic development, business people and management are required to be able to manage their companies effectively and efficiently and must have a competitive advantage in order to improve a company's financial performance. To assess the company's financial performance or financial condition, an analysis of the financial statements is required. As for the financial function which aims to regulate the search for sources of funds needed by a company and then regulate the use of the funds obtained, the sources of funds consist of two parts, namely internal sources of funds (own capital) and external sources of funds (loan capital). Internal funding sources are funds originating from within the company, these funds consist of depreciation of funds and retained earnings.

A company will be more dominant in choosing to use its own capital as its main capital rather than having to use loan capital. The advantage that can be obtained from the use of own capital is that there is no interest expense. But on the contrary, loan capital has interest costs, but debt interest can be a deduction for corporate taxes, while the loss that can be obtained from using debt is the amount of risk that must be borne if the company is unable to fulfill its obligations in paying debts. Capital issues will cover both efforts to obtain, provide and use the capital needed by the company in the most effective and efficient way.

The capital structure is the proportion of the use of long-term debt and own capital in meeting the company's funding needs. The capital structure is expected to increase a company's

profits so that it can increase the welfare of company owners. Capital structure control is expected to affect the profit or profit of the company. So for a company the capital structure is the ratio between the debt owned by the company and the equity (capital) of the company. According to Margaretha (2011, 112-114), the capital structure describes the company's permanent financing consisting of long-term debt and equity. If the actual debt is below the target, then the loan needs to be added, if the debt ratio exceeds the target then the shares will be sold. Capital structure can be calculated with several ratios,

This relates to the determination of a certain scale of total capital needed by a company that will be funded with debt and equity, the state of the capital structure will have a direct impact on the company's financial position so that it can affect the company's performance. This capital structure is very important to understand because it relates to decision making in terms of choosing the type of source of funds, both obtained from within and from outside the company.

One measure of the success of company management in managing its finances is the high level of profitability. Therefore, efficient management of sources of funds is necessary so that companies are able to increase their profitability. Profitability is very important for a company because it can reflect the success and survival of a company, the company's ability to generate profits during a certain period. The profitability ratio is the ratio that assesses the company's ability to make a profit. In this study, profitability is measured using Return On Equity (ROE). ROE is used to measure how much the company's ability to obtain profits that will be the right of the company's shareholders.

The animal feed sub-sector is one of the sub-sectors listed on the Indonesia Stock Exchange, and is part of a manufacturing company in the basic materials and chemical sectors, this company is engaged in selling animal feed such as chicken, fish, shrimp and other livestock in Indonesia. In the animal feed industry there are 4 issuers, namely PT. Chareon Pokphand Indonesia Tbk (CPIN), PT. Japfa Comfeed Indonesia Tbk (JPFA), Malindo Feedmill (MAIN), and Sreeya Sewu Indonesia which was originally named Sierad Produce (SIPD).

Based on the table above, it can be seen that there are two companies that are more dominant in using their own capital in their capital structure, so that the company's DER level is below 90 percent, this indicates that the company has more debt than its own capital.

Looking at previous research on the effect of capital structure on profitability bySukmawati (2019)"The effect of capital structure, liquidity and company size on profitability in Property and Real Estate companies", explains that the variable capital structure has a positive and not significant effect on profitability, liquidity has a negative and significant effect on profitability, and company size has a negative and significant effect on profitability.

Research conductedAyem & Nugroho (2016)explain that any increase in capital structure will be accompanied by an increase in profitability. The research was conducted byApri & Setyadi (2022)about "The effect of liquidity, capital structure and activity on the profitability of manufacturing companies in the animal feed sub-sector on the Indonesia Stock Exchange", the results of the study explain that partially liquidity has no significant effect on profitability, capital structure has no significant effect on profitability and activity has no significant effect on profitability while simultaneously liquidity, capital structure and activity have a significant effect on profitability. Another research conducted byIdoge & Chukwuji (2014), examining working capital as a factor of the health status of a poultry farming business, typically a farm experiencing consistent operating losses will have current assets that are shrinking in relation to total assets.

RESEARCH METHODS

Causal research (Causal Research), is used to look for the effect of independent variables on the dependent variable. The research was conducted on companies listed on the Indonesia Stock Exchange. In this study, the population is the animal feed sub-sector companies listed on the Indonesia Stock Exchange in 2014-2021 totaling 4 companies. last year since 2014-2021.

Capital structure is an illustration of the form of a company's financial proportions, namely between owned capital originating from long-term debt (long-term liabilities) and equity (shareholders' equity) which is a source of financing for a company(Fahmi, 2017:179).

The capital structure ratio used in this study is the DER (debt to equity ratio), which functions to determine the amount of funds provided by loans to company owners. In other words, this ratio aims to determine every rupiah of own capital that is used as collateral for debt. which is expressed in the formula:

$$DER = \frac{\text{Total Hutang}}{\text{Modal Sendiri}} \text{x} 100\%$$

According toCashmere (2019:198)Profitability is the ratio used by a company to assess its ability to seek profit or profit. The profitability ratio can also provide a measure of the level of effectiveness of the company's management, as indicated by the profit earned from sales and investment income. So in essence, the use of this profitability ratio will show the efficiency of the company.

The profitability ratio used in this study is the ROE (return on equity) ratio. The profitability ratio measures a company's ability to earn profits. Calculating the amount of ROE by comparing net income with equity (own capital). This variable is used to measure the return on capital of the company owner, which is expressed in the formula:

$$ROE = \frac{\text{Laba Setelah Pajak}}{\text{Modal Sendiri}} \text{x} 100\%$$

The analytical technique used in this study is a simple regression analysis technique used to measure the influence of the independent variables on the dependent variable. To achieve the objectives of this study, a classical assumption test was carried out to ascertain whether the simple regression model used had no problems with linearity, normality and autocorrelation. If all of that is fulfilled, it means that the simple regression model is feasible to use. To calculate the regression, the authors use the SPSS (Statistical Product for Service Solution) computer program version 25.

RESULTS AND DISCUSSION

Classic assumption test

The analysis model used is simple linear regression which previously carried out the classic assumption test which includes the linearity test, normality test and autocorrelation test

Linearity Test

Table 1. Linearity Test results

UJI LINEARITAS	
	Sig.
Deviation from Linearity	0.125

Source: Data processed with SPSS 25 (data attached)

Based on the table above, the Deviation from linearity Sig value is 0.125, which means it is greater than 0.05. it can be concluded that there is a significant linearity relationship between DER (X) to ROE (Y).

Normality test

Normality Test Results with Kolmogorov-Smirnov

a. If the significant value is > 0.05 then the distribution is normal.
b. If the significant value <0.05 then the distribution is not normal.

Table 2. Normality Test Results with One Sample Kolmogorov Smirnov

UJI NORMALITAS	
Asymp. Sig. (2-tailed)	**0.029**

Source: Data processed with SPSS 25 (data attached)

From table 2 above, the significance value of Asymp:Sig is obtained. (2-tailed) of 0.029 which is smaller than 0.05, so the data is not normally distributed. Another method to find out normality is to use a graphical analysis method, by looking at the histogram graph or by looking at the Normal Probability Plot. The normality of the data can be seen from the distribution of the data (points) on the diagonal axis on the Normal P-Plot chart or by looking at the histogram of the residuals.

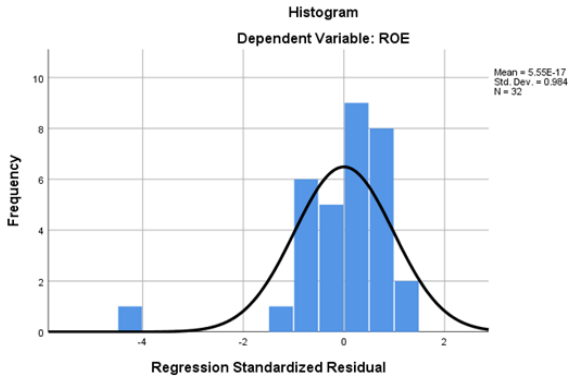

Figure 1. histogram

Source: Processed data (Output SPSS 25)

From the picture above it can be seen that the distribution pattern is close to normal, the data follows the direction of the histogram graph line with a bell shape.

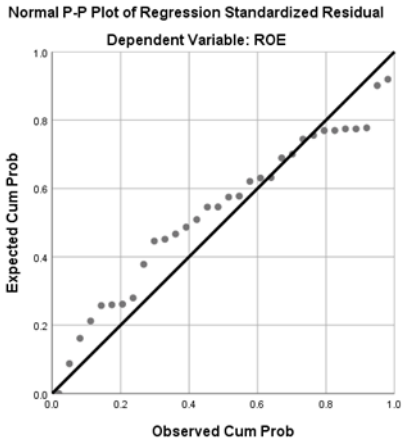

Figure 2. PP Plot Graph

Source: Processed data (Output SPSS 25)

In the Normal Probability Plot image above, it can be seen that the dots spread around the diagonal lines, and their distribution approaches the diagonal lines. This means that the graph shows a distribution pattern close to normal, so the regression model meets the assumption of normality.

Autocorrelation Test

Table 43Autocorrelation Test Results

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.488[a]	0.238	0.213	0.11137	1.546
a. Predictors: (Constant), DER					
b. Dependent Variable: ROE					

Source: Data processed with SPSS 25

Based on the results of the autocorrelation test above, it can be seen that the Durbin Watson table shows n = 32, k = 2, dL = 1.3093 dU = 1.5736, 4-DW (4 – 1.546 = 2.454). Based on the SPSS results above, it can be seen that the DW value = 1.546, which means 1.33093 <2.454> 1.5736, so it can be concluded that there are no signs of autocorrelation.

Hypothesis Test (T Test)

The basis of the analysis is:

1. If t count < t table then H0 is accepted H1 is rejected, this means that there is no influence between the independent variables on the dependent variable.
2. If t count > t table then H0 is rejected H1 is accepted, this means that there is influence between the independent variables on the dependent variable

Table 4. Hypothesis Testing Results

Uji Hipotesis		
T Hitung	T Tabel	Kesimpulan
-3.064	2.042	**Signifikan**

Source: Data processed with SPSS 25 (data attached)

To test the effect of capital structure on profitability, a statistical t test was carried out. The table above shows that t_{count}= -3.064. with a significance level = 5% or 0.05, the degree of freedom (df) can be calculated by df = n-2 = (32-2) = 30. From this result, the value of t is obtained.$_{table}$of 2,042. these results show that $t_{count} > t_{table}$.Because the t value$_{count}$-3.064 is greater than the t value$_{table}$2042. then the hypothesis is rejected with a significance value of 0.005 <0.05 means significant. It can be shown that DER has a negative and significant effect on ROE. This negative direction means that the greater the DER value owned by the company identified with the large total debt value, the lower the profitability (ROE) obtained. Profitability has a negative effect on debt, which means that when the profit earned by the company increases, it does not need to be followed by increasing the company's debt, because the ability to earn high profits means that the company does not need to use loans from outside the company. The higher the company's profits, the proportion of equity will also increase and the proportion of debt will tend to decrease (Ariyasa et al, 2017).

Determination Coefficient Test

Table 5. Determination Coefficient Test Results

Koefisien Determinasi		
R	**R^2**	**Korelasi**
0.488	0.238	Sedang

Source: Data processed with SPSS 25 (data attached)

From the table above it can be seen that the correlation coefficient (R) is 0.488. in the interpretation table of the correlation coefficient value, the value of 0.488 is between (0.40-0.599), which indicates that there is a moderate correlation between the variables of capital structure and profitability.

Based on the SPSS output it appears that from the calculation results the coefficient of determination (R^2) is 0.238 or 23.8%. This means that the independent variable (X), namely capital structure, only contributes an influence of 23.8% to the dependent variable (Y), namely profitability. The remaining 76.2% is influenced by other factors.

DISCUSSION

This study aims to determine how the effect of capital structure on profitability in animal feed sub-sector companies listed on the Indonesia Stock Exchange. The description of the capital structure as measured by the DER ratio in companies in the animal feed sub-sector shows that the company's DER fluctuates from year to year.

Over the last eight years, the DER rate has tended to increase, while the ROE rate over the last eight years has actually decreased. This means that the effect of DER on ROE has a negative impact.

During the research period (2014-2021) the average company has a DER level of above 50% from year to year. This increase in DER indicates that the animal feed sub-sector companies listed on the Indonesia Stock Exchange have experienced an increase in their capital structure. Debt and own capital owned by the company are used to increase the construction of chicken slaughterhouses, purchase raw materials and pay suppliers. ROE acquisition from animal feed companies during the study period showed a low number and was below the industry standard (40%), there were even several companies that obtained negative ROE. The negative ROE is actually obtained when the company increases its capital structure.

Based on the relevant theory, capital structure has a positive and significant influence on profitability. However, based on the facts on the ground, it turns out that the capital structure has a negative and significant impact on the profitability of the animal feed sub-sector companies listed on the Indonesia Stock Exchange. Where every increase in company debt actually results in a decrease in company profitability to be negative, even so, increases or decreases in capital structure do not provide a drastic increase or decrease in changes in company profitability.

*Debt to equity ratio*A low one means that the debt or liability of the company is smaller than all of its assets, so that in adverse conditions (eg bankruptcy), the company can still pay off all of its debts or obligations. Conversely, the higher the debt to equity ratio, the greater the composition of the amount of debt or liabilities compared to the total net capital it owns, which creates a heavy burden for outsiders. The responsibility of outsiders is getting heavier, which shows that the company's funding sources are highly dependent on external parties. If the company fails to manage its debts properly and optimally, it will have a negative impact on the company's financial health.

The results of this study are also supported by research conducted by Nurlela & Dimyati (2021) which states that capital structure has a negative and insignificant effect on profitability.

This indicates that the animal feed sub-sector companies listed on the Indonesian stock exchange use more debt than their own capital.

In the classic assumption test, the researcher did not use the heteroscedasticity test and the multicollinearity test because these tests were only used in the multiple linear regression model. While in this study researchers used a simple linear regression model. In addition, not all classical assumption tests must be carried out in linear regression analysis, for example the multicollinearity test is not carried out in simple regression analysis and the autocorrelation test does not need to be applied to cross sectional data. Classical assumption test analysis is not used in SMART PLS. This is because SMART PLS uses the Partial Least Square – Structural Equation Modeling (PLS-SEM) approach. According to Ghozali (2016) said that PLS uses a powerful analytical method, because it is not based on many assumptions and the data also does not have to be normally distributed and the sample size does not have to be large. The classic assumption tests commonly used are the normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. Simple linear regression or simply called simple linear regression is linear regression with one independent variable and one dependent variable. Meanwhile, multiple linear regression or also known as multiple linear regression is a linear regression with one dependent variable and several independent variables. Simple linear regression or simply called simple linear regression is linear regression with one independent variable and one dependent variable. Meanwhile, multiple linear regression or also known as multiple linear regression is a linear regression with one dependent variable and several independent variables. Simple linear regression or simply called simple linear regression is linear regression with one independent variable and one dependent variable. Meanwhile, multiple linear regression or also known as multiple linear regression is a linear regression with one dependent variable and several independent variables.

Based on the facts on the ground, the losses suffered by the company were caused by several factors, including:

1. From 2014-2021, the company's losses were due to a ban on corn imports, a weakening of the exchange rate, and an increase in selling expenses, which resulted in a decline in the company's profits.
2. Due to the unpredictability of bird flu outbreaks, the bird flu virus has had a dominant impact on animal feed companies in Indonesia.
3. Soaring raw material prices can affect the continuity of the company's production. The unfavorable threat factor from a business is the strengthening of the bargaining position of suppliers of raw materials or raw materials needed for further processing. In addition, there are other factors that cause the company to suffer losses, namely unstable exchange rates or strong and weak exchange rates (exchange rates).

The results of the hypothesis test show that the capital structure variable has a negative and significant effect on profitability, this negative direction means that the greater the DER value owned by a company identified with the large total debt value, the lower the ROE profitability value obtained.

The results showed that there was an increase in the capital structure which was inversely proportional to the company's profitability, which actually experienced a decline. The results of this study are in accordance with the opinion of experts, namely Brigham and Houston (2010: 143) which state that companies that use more debt in their operations will receive higher interest expenses so that these interest expenses reduce net income. This is also in accordance with the Trade of theory which states that the higher the use of debt in companies, the higher the risk they will experience financial difficulties due to paying fixed interest rates that are too large, so that these financial difficulties will reduce the company's profitability.

To find out the effect of capital structure on profitability in animal feed sub-sector companies listed on the Indonesian stock exchange, the results of a simple regression analysis calculation between

capital structure (X) and profitability (Y), then a regression coefficient of -0.107 is obtained, which means that if the structure capital increases by 100% then profitability (Y) will decrease by 10.7%

CONCLUSION

Based on the results of simple linear regression, capital structure (X) has a negative and significant effect on profitability (Y). If the capital structure increases by 100%, profitability (Y) will decrease by 10.7%. The results of testing the hypothesis, DER shows that partially has a negative and significant effect on ROE of animal feed sub-sector companies listed on the Indonesia Stock Exchange, where the significance value is 0.005 <0.05, meaning that the effect is significant. This negative direction means that the greater the DER value of the company identified with the large total debt value, the lower the ROE profitability obtained. So that the effect of DER on ROE is 23.8%, the rest is influenced by other variables outside this study.count<ttable namely -3.064 <2.042 so the hypothesis is rejected. Where it can be concluded that the capital structure is negative and significant to profitability in animal feed sub-sector companies listed on the Indonesia Stock Exchange

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