Kilisuci International Conference on Economic & Business

Vol. 1 No. 1, 2023

Analysis of The Impact of Capital Structure and Company Size on Profit Quality, Using Company Age As Control Variable

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Article Information

Submission date	2022-11-17
Revised date	2022-11-18
Accepted date	2022-12-09

Abstract

Research aim : *This paper aims to empirically determine the effect of capital structure, company size, and company age as control variables on earnings quality in food and beverage sub-sector companies listed on the Indonesia Stock Exchange for the 2019-2021 period.*

Design/Method/Approach : *This research is a type of quantitative research that uses secondary data in the form of company annual reports. This study used a sample of 14 companies in the food and beverage sub-sector. This paper examines the factors that influence the quality of earnings on the Indonesian stock exchange. This research was conducted at 14 food and beverage sub-sector companies in 2019-2021. Data analysis techniques in this study used regression model selection tests, classical assumption tests, multiple linear regression, and partial hypothesis testing with the SPSS version 22 program.*

Research Finding : *Based on the results of data analysis, the research findings are (1) capital structure has a negative effect on earnings quality, (2) firm size has a positive effect on earnings quality, (3) firm age has no effect on earnings quality.*

Theoretical contribution/Originality : *This paper expands knowledge and investigates the factors that affect earnings quality.*

Practitionel/Policy implication : -

Research limitation : *As this paper focuses on one country, the findings may not be generalizable. In addition, the relatively small sample size could be another limitation.*

Keywords : *Earnings Quality, Capital Structure, Company Size*

1. Introduction

Previously, a company was founded with the hope that the company would be able to generate significant income. Many believe that high profits reflect the company's good performance during this period. The profit generated by the company needs to be seen and analyzed in more depth whether the profit generated by the company has good earnings quality, because this can affect the economic decisions taken by management and investors. Earnings with low quality do not show true information about management's performance in that period so that it can mislead users of financial statements. If the low quality earnings are used by investors to establish the company's market value, then the profit cannot show the true market

value of the company. Earnings quality is an assessment of the extent to which a profit can be obtained repeatedly, can be controlled, and can describe the company's profitability in real terms. There are several things in determining the quality of earnings, namely (1) closeness of profits to operational cash flow, (2) persistent earnings, (3) estimates, judgments, and predictions, and (4) earnings management https://www.jtanzilco.com/blog/detail/847/slug/memahami-quality-profit-company. Quality earnings are profits in the financial statements that reflect the company's actual financial performance [1]; earnings quality is an important aspect to assess the company's financial health. Parties associated with the company will always pay attention to the company's financial statements. Earnings quality can be interpreted as a company's ability to report company profits that show actual company profits [2].

Profits in the financial statements are a reflection of the company's actual financial performance. Interested parties such as investors or potential investors, financial analysts and other users of financial information can find out how the actual quality of earnings is. Earnings quality is important for investors to help them reduce information risk. Investors will tend to calculate information risk by conducting analysis so that it does not contain a significant risk of loss. Investors know that there is an unfavorable allocation of resources in companies with low earnings quality. Good earnings quality can be said to be good if reported earnings can be trusted as an indicator in predicting future earnings [3]. Research conducted by [4] who examined the effect of liquidity, capital structure and profitability on earnings quality, with the research finding that liquidity, capital structure did not affect earnings quality, except profitability had a positive and significant effect on earnings quality. Factors affecting the quality of earnings in basic and chemical industrial companies on the IDX by [5] prove that capital structure partially has a significant and positive effect on earnings quality, while profit growth and company size have no effect but provide a positive direction; capital structure and corporate governance do not affect earnings quality, while dividend payments affect earnings quality [6]; his research on the effect of capital structure, firm size, growth and IOS on earnings quality proves that capital structure and firm size affect earnings quality, while growth and IOS have no effect on earnings quality [7].

Effect of earnings persistence, capital structure. company size, tax allocation between periods, liquidity, and profit growth on earnings quality made by [8] shows that tax allocation between periods and profit growth has an effect on earnings quality, earnings persistence, capital structure, firm size, and liquidity has no effect on earnings quality; earnings persistence has no effect on earnings quality, capital structure has a negative and significant effect on earnings quality as research conducted by [9]; company size has a negative effect on earnings quality, profitability and leverage have no effect on earnings quality, but simultaneously have an effect; partially capital structure, company size, liquidity and profit growth have a significant effect on earnings quality [10]; dividend payout and profitability affect earnings quality but the board of directors, company size, managerial ownership, capital structure and liquidity do not affect earnings quality [11].

The effect of profit growth, capital structure, audit quality and firm size on earnings quality, indicates that capital structure and audit quality have a negative effect on earnings quality, firm size has a positive effect on earnings quality and earnings growth has no effect on earnings quality [12]; firm size and income smoothing have a positive and significant effect on earnings quality while liquidity has no effect on earnings quality; capital structure has a

negative effect on earnings quality, profitability, firm size, liquidity has a positive effect on earnings quality but profit growth has no effect on earnings quality [13].

The existence of problems regarding earnings quality and the inconsistency of several research results, different times and places of research encourage researchers to conduct further research on earnings quality and the factors that influence it. This research was conducted because earnings information is significant information for investors to make investment decisions so that the quality of reported earnings is a major concern. The situation of company profits that are not qualified will mislead investors in making decisions.

1.1. Statement of Problem

Based on the introduction that has been explained previously, the researcher statement of problem as follows:

1. Capital structure has a negative effect on earnings quality.
2. Firm size has a positive effect on earnings quality.

Capital structure and firm size influence earnings quality by using firm age as a control variable.

1.2. Research Objectives

This research Objectives to:

1. Knowing the negative effect on earnings quality
2. Knowing the positive effect of company size on earnings quality
3. Knowing the effect of capital structure and company size on earnings quality by using the age of the company as a control variable.

2. Method

This type of research used is quantitative research. Quantitative research is research that places more emphasis on testing theories by measuring research variables expressed in numbers and analyzing data using statistical procedures.

The research sample is 23 food and beverage industry companies listed on the IDX. Using secondary data, namely annual financial reports. The observation period is 2019-2021.

Researchers used purposive sampling method in taking samples. Certain criteria are used: 1) Food and beverage sub-sector companies listed on the IDX for the 2019-2021 period; 2) Manufacturing companies that present consecutive financial reports ending December 31, 2019-2021; 3) Manufacturing companies that present financial reports using rupiah units; 4) Manufacturing companies that have positive profits for the 2019-2021 period, resulting in 14 food and beverage industry companies.

Researchers used a data collection method, namely documentation data in the form of annual financial reports for the 2019-2021 period and literature studies.

Data accessed from the site*www.idx.co.id*. Documentation studies such as the annual financial reports of food and beverage industry companies. While the literature study is carried out by examining journals, reading sources, and previous research that are relevant to research problems.

Capital structure is measured using leverage level indicators, namely the Debt to Equity Ratio (DER). If the level of leverage of a company is low then the company has a high quality of earnings, and vice versa. The formula for calculating leverage is:

$$Leverage = \frac{\text{Total Liabilitas}}{\text{Total Ekuitas}}$$

Company size of the company seen from the aspect of total assets owned. Company size is measured using the log of total assets indicator, with the formula:

$$SIZE_{it} = Ln\ TA_{it}$$

Keterangan :
$SIZE_{it}$: Ukuran perusahaan i pada periode (tahun) t
TA_{it} : Total aset perusahaan i pada periode (tahun) t

The control variable used is the age of the company. The age of the company is measured since it was first listed on the IDX or initial public offering (IPO): AGE = Age of the company since IPO [14]. IPO is when the company's initial public offering is carried out, this shows that the public has ownership of the company.

Earnings quality is measured using accrual quality indicators, namely: earnings response coefficient (ERC) = Operating Cash Flow / EBIT (Earning before interest tax).

The researcher used a multiple linear regression analysis method, namely:

$$KL = \alpha + \beta 1SM + \beta 2UP + \varepsilon$$

Information :
KL : Earnings quality
α : Constant
β1, β2 : Regression coefficient of independent variables
SM : Capital structure
UP : Company size
ε : Standard error

Descriptive statistics are a method for organizing and analyzing quantitative data, namely: frequency, central tendency (mean, median, mode), dispersion (standard deviation and variance), and the correlation coefficient between research variables. The size used in descriptive statistics depends on the type of construct measurement scale used in the study.

The data normality test is intended to test whether the residual values that have been standardized in the regression model are normally distributed or not. It can be assumed that the residual values follow a normal distribution. There are two ways to detect whether the residuals are normally distributed or not, namely by graphic analysis and statistical tests. The statistical test that can be used is the non-parametric statistical test with the Kolmogorov Smirnov method. Kolmogorov Smirnov's non-parametric statistical test is a normality test using the cumulative distribution function. The standardized residual values are normally distributed if the Sig. > α, but if the Sig. < α means that the sample data is not normally distributed.

Multicollinearity or commonly referred to as Fanda Collinearity (Multicollinearity) is a linear relationship between the independent variable X in the multiple regression model. To determine multicollinearity, look through the Variance Inflation Factors (VIF) values in the Coefficients table. The test criterion is if the value of VIF <10 then there is no multicollinearity between the independent variables, and vice versa.

The heteroscedasticity test aims to test whether in the regression model there is inequality between the variances of the residuals from one observation to another observation. If the variance of the residuals between observations is constant, then it is called homoscedasticity.

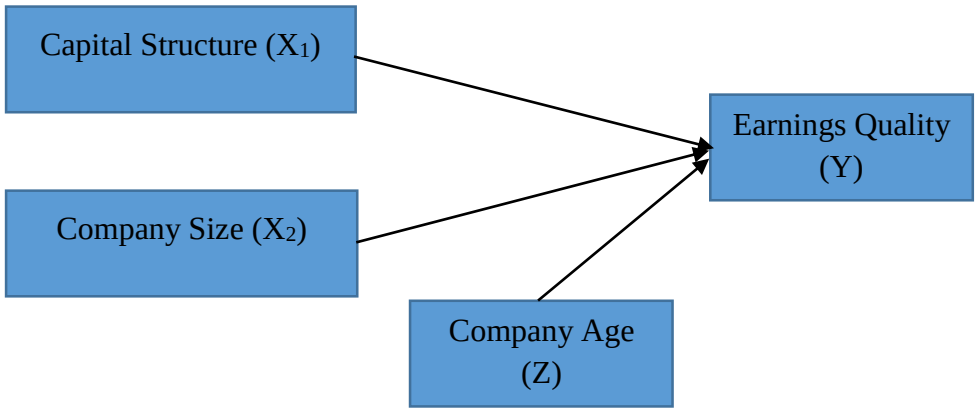
Conversely, if the residual variance is different it is called Heteroscedasticity. A good regression model is that there is no heteroscedasticity. If the variance of the residuals between observations is constant, the conclusion is that there is homoscedasticity so that the regression model is declared good. A good regression model is that there is no heteroscedasticity so that it can be tested by looking at the scatterplot between SRESID and ZPRED whether there is a problem of heteroscedasticity.

The autocorrelation test aims to test whether in a linear regression model there is a correlation between the confounding errors in period t and the previous confounding errors. A good regression model must be free from autocorrelation. If there is a correlation, then it is identified that there is an autocorrelation problem. One way to detect autocorrelation is to use the Durbin-Watson table, with the number of independent variables (k) and the amount of data (n) so that dL and du are known, then the distribution of decision areas can be obtained or there is no correlation.

This test of the coefficient of determination is to measure how much the model's ability to explain the independent variable to the dependent variable. This R2 value provides the information needed to predict the independent variable.

This test was also carried out to measure the accuracy of the sample regression function in estimating the actual value statistically. The F test basically shows whether the independent variables are included in the model which have a simultaneous influence on the dependent variable. The regression model is said to be feasible if the significant level is <0.05 while the significant level is > 0.05, then it is declared not feasible.

The t test can show how much influence the independent variables have on the dependent variable. independent has no significant effect on the dependent variable.



Source: researcher development, 2022

Figure 1. Conceptual Framework

3. Results and Discussion

3.1 Descriptive Statistical Test

Based on the results of descriptive statistical tests, the research variables, namely capital structure, company size, earnings quality and company age, are:

Table 1. Descriptive Statistics

	Means	Standard Deviation	N
SM	0.78401929	0.583001745	42
Uk. Perusah	22.80062381	5.884088245	42
KL	4.31856667	12.423222283	42
Um. Perusah	17.92857143	13.947507556	42
Valid N			42

Source: Processed financial report data for the 2019-2021 period

In the capital structure (SM) the mean is 0.78401929 with a standard deviation of 0.583001745. This means the mean value > standard deviation thus identifying that the results obtained are good. Because the standard deviation is a reflection of the occurrence of deviations. For company size, the mean is 0.22.80062381 with a standard deviation of 0.5.884088245. This means the mean value > standard deviation thus identifying that the results obtained are good. Because the standard deviation is a reflection of the occurrence of deviations. On earnings quality (KL), the mean is 0.4.31856667 with a standard deviation of 12.423222283. This means that the mean < standard deviation indicates that the results obtained are not good. Because the standard deviation is a reflection of the occurrence of deviations. At the age of the company, the mean is 17.92857143 with a standard deviation of 13.947507556. This means the mean value > standard deviation thus identifying that the results obtained are good. Because the standard deviation is a reflection of the occurrence of deviations.

3.2 Classic Assumption Test

Based on the results of the Kolmogorov Smirnov non-parametric statistical test. The Kolmogorov Smirnov Z value is 0.242 with an Asymp value. Sig. (2-tailed) > 0.00 it can be said that the capital structure, firm size, audit quality and firm age are normally distributed.

From the results of the multicollinearity test it can be seen that the tolerance value is greater than 0.10 and the VIF value is less than 10. Thus it can be concluded that all independent variables in this study were not detected from multicollinearity symptoms or non-multicollinearity assumptions were fulfilled.

Based on the heteroscedasticity test using the graphical analysis method, the regression model formed indicates that there are no symptoms of heteroscedasticity.

The results of the autocorrelation calculation, the Durbin-Watson value is 2.240 and can be seen in the Durbin-Watson table at α = 5%, the number of independent variables (k) is 4 variables and there are a number of data (n) observations of 42, so it is obtained dl = 1 .7109 and du = 1.8017 so that it meets the criteria du < d < 4-du (1.8017 < 2.240 < 2.2891) with the decision of this study being not rejected. Thus the regression model that will be used is possible without autocorrelation problems. In addition, the resulting regression model can be used to estimate the value of the dependent variable on the value of the independent variable.

3.3 Multiple Linear Regression Analysis

The following are the results of multiple linear regression analysis on the variables capital structure, company size, company age on earnings quality:

Table 2. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	std. Error	Betas			tolerance	VIF
1	(Constant)	-6,044	11,631		-.520	.606		
	Capital Structure	9.107	3,337	.427	2,729	010	.844	1,185
	Uk Perush	.257	.374	.122	.686	.497	.658	1,519
	Perush age	-.147	.153	-.161	-.961	.343	.736	1,358

a. Dependent Variable: Quality of Profit

The resulting regression equation model is as follows:

$$Y = -6.044 + 0.427\ BC + 0.122\ UP + \varepsilon$$

$$KL = -6.044 + 0.427\ BC + 0.122\ UP + \varepsilon$$

3.4 Determination Test (R Test)

Based on the results of the determination test, the R value was 0.462. This means that the variable capital structure, company size using the control variable firm age has an effect on earnings quality of 46.2%, the remaining 53.8% is influenced by other variables.

3.5 Test t

Table 3. Result of the Effect of Capital Structure on Profit Quality

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.264	3.013		-.751	.457
	Struk Modal	8.396	3.097	.394	2.711	.010

a. Dependent Variable: Kual Laba

Based on the results of the t test, it means that the significance value is t <0.05 = 0.010 <0.05, which means that capital structure has a significant effect on earnings quality. The capital structure of basic and chemical industry companies with internal and external funding sources can have a positive impact on both companies and investors. Basic industry and chemical companies are able to maintain financial stability with good capital structure management. Where the company's external funding sources allocate debt for company activities and welfare which ultimately contributes to increasing profits and company equity capital. Then this will have an impact on the market reaction. Because the information presented in the financial statements describes a stable company condition so that investors will be more interested in investing in companies that have stable financial conditions and can provide positive returns. This finding is in accordance with the results of research conducted by [5].

Table 4. Result of the Effect of Company Size on Profit Quality

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.550	7.842		.198	.844
	Uk Perush	.121	.333	.058	.364	.718

a. Dependent Variable: Kual Laba

Based on the results of the t test, it is known that the significance value of t > 0.05 = 0.718 > 0.05, which means that company size has no effect on earnings quality. This is because large or small companies do not determine the amount of profit generated because other factors such as good governance play a greater role in generating market response. This finding is supported by research which states that firm size has no effect on earnings quality [11];[15].

The results of the correlation test using company age control variable are obtained as follows:

Table 5. Results Using Control Variables

Correlations

Control Variables			Struk Modal	Uk Perush	Kual Laba	Umur Perush
-none-[a]	Struk Modal	Correlation	1.000	-.328	.394	-.040
		Significance (2-tailed)	.	.034	.010	.801
		df	0	40	40	40
	Uk Perush	Correlation	-.328	1.000	.058	-.471
		Significance (2-tailed)	.034	.	.718	.002
		df	40	0	40	40
	Kual Laba	Correlation	.394	.058	1.000	-.236
		Significance (2-tailed)	.010	.718	.	.133
		df	40	40	0	40
	Umur Perush	Correlation	-.040	-.471	-.236	1.000
		Significance (2-tailed)	.801	.002	.133	.
		df	40	40	40	0
Umur Perush	Struk Modal	Correlation	1.000	-.393	.396	
		Significance (2-tailed)	.	.011	.010	
		df	0	39	39	
	Uk Perush	Correlation	-.393	1.000	-.062	
		Significance (2-tailed)	.011	.	.699	
		df	39	0	39	
	Kual Laba	Correlation	.396	-.062	1.000	
		Significance (2-tailed)	.010	.699	.	
		df	39	39	0	

a. Cells contain zero-order (Pearson) correlations.

Effect of capital structure on earnings quality, a significant value of 0.010. This means that it is less than 0.05, so capital structure has a significant effect on earnings quality, as well as using a control variable with a significant value of 0.010 with a very low correlation value of 0.394.

The effect of company size on earnings quality, a significant value of 0.718. This means that it is greater than 0.05, so company size has no effect on earnings quality, as well as using the control variable company age, a significant value of 0.699 with a very low correlation value.

4. Conclusion

Based on the results and discussion it is concluded that: capital structure has a significant effect on earnings quality, firm size has no effect on earnings quality, and capital structure, firm size using the firm age control variable has no effect on earnings quality and the correlation is very weak.

While the advice given is for future researchers to further expand the research sample and observation period of 5-10 years, adding other variables such as the investment opportunity set (IOS), because this study uses a small sample so the results cannot be generalized.

The implication of this research is that this paper focuses on one country, so the findings may not be generalizable. In addition, the relatively small sample size could be another limitation.

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