

The Influence of Company Size and Capital Structure on Earnings Quality in Manufacturing Companies in the Food & Beverage Sub-Sector Listed on the Indonesia Stock Exchange (BEI)

Ika Nurhaliza

Department of Management, Universitas Pembangunan Panca Budi, Indonesia

Geby Citra Ananda

Department of Management, Universitas Pembangunan Panca Budi, Indonesia

Vira Dwi Ananda

Department of Management, Universitas Pembangunan Panca Budi, Indonesia

Nia Deniati Lumbangaol

Department of Management, Universitas Pembangunan Panca Budi, Indonesia

Ayu Pebrianti

Department of Management, Universitas Pembangunan Panca Budi, Indonesia

*Corresponding author: ikanurhaliza0204@gmail.com

Abstract. *This study aims to determine the size of the company, and capital structure, on the quality of earnings. The sample in this study is the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2015-2019 period. Data was collected by the documentation method. The sample selection used a purposive sampling method and obtained 17 companies. Hypothesis testing was carried out using pooled least s-square data regression analysis method. The results of this study indicate: (1) Firm Size has a positive and significant effect on Earnings Quality and (2) Capital Structure has a negative and insignificant effect on Earnings Quality. by 45% influenced by other factors not described in this study.*

Keywords: *Company Size, Capital Structure, and Quality.*

INTRODUCTION

The importance of profit information for its users drives each company to strive for increased earnings. However, certain parties resort to unhealthy means to achieve their individual goals regarding the company's profit information. This practice of profit manipulation is not uncommon among company management who are aware of the internal conditions. The intention is to attract investors to invest their funds in their company. Such incidents result in poor-quality earnings. Profit is one of the indicators that can be used to measure a company's operational performance. Typically, company managers have more information about the company's condition than external parties. This can lead to actions by company management to report earnings that do not accurately

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*Corresponding author, ikanurhaliza0204@gmail.com

reflect the true condition of the company. This is often driven by personal interests, such as obtaining bonuses. If this happens, it can lead to low earnings quality, causing users to make mistakes in decision-making.

According to Themin (2012), profit is the increase in economic benefits during an accounting period (e.g., an increase in assets or a decrease in liabilities) that results in an increase in equity, other than those related to transactions with shareholders. Net profit can have different meanings, requiring clarification. Strict net profit means after all deductions (as opposed to only certain deductions used against gross profit or margin). Wild and Subramanyam (2014) state that earnings or net income indicate a company's profitability and reflects the return to equity holders for the respective period, while items in the report detail how the profit is obtained.

Factors influencing earnings quality include company size and capital structure. Earnings quality refers to the profit in financial statements that reflects the actual financial performance of the company. Profit can be considered high quality if the reported earnings can be used by financial statement users to make the best decisions and meet the qualitative characteristics of financial statements, namely relevance and reliability.

Company size is an indicator that can be used as a guide to the company's condition, with benchmarks such as the number of employees, total assets, total shares outstanding, and the achievement of sales within a specific period. The debt ratio, a measure of capital structure, is a variable used to determine the extent to which a company's assets are financed by debt. Capital structure has an impact on earnings quality because if a company's assets are more funded by debt than equity, the role of investors diminishes, and the company is perceived as unable to maintain financial balance in the use of funds between available and required capital.

RESEARCH METHOD

The research approach in this study utilizes a quantitative research method that is associative, meaning it investigates the relationship between two or more variables (Sugiyono, 2013). The relationship employed in this research is causal, consisting of independent variables (those that influence) and dependent variables (those that are

influenced) (Sugiyono, 2013). This study aims to determine the influence of variables, namely the variables (X) Company Size, and Capital Structure on (Y) Earnings Quality.

The population used comprises manufacturing companies listed on the Indonesia Stock Exchange (BEI) from 2009 to 2011, totaling 30 companies. The sample selection method utilizes non-probability sampling with purposive sampling techniques. Out of the 30 manufacturing companies in the population, only 17 meet the criteria to be included as samples in this study. All data used in this analysis are secondary data, and the research employs the Pooled Least Squares Regression method, combining both cross-sectional and time-series data formed annually from 2015 to 2019. The data processing tool used in this research is the Eviews 10 computer software.

FINDINGS AND DUSCUSSION

Descriptive Data

Descriptive statistical analysis is used to understand the description of data in terms of maximum values, minimum values, mean (average) values, and standard deviation values. In this study, the variables used in descriptive statistical calculations are SIZE, DER, and KL. Based on the results of the descriptive analysis, the sample is described as follows:

Table 1. Statistical Descriptive Tests

	KL?	SIZE?	DER?
Mean	3.286118	2.806941	6.777765
Median	0.820000	2.790000	0.990000
Maximum	136.9200	3.040000	265.4100
Minimum	-12.77000	2.590000	0.040000
Std. Dev.	15.12451	0.145602	36.67678
Skewness	8.265083	0.248875	6.384644
Kurtosis	73.45348	1.586629	42.28744
Jarque-Bera	18547.49	7.952360	6044.058
Probability	0.000000	0.018757	0.000000
Sum	279.3200	238.5900	576.1100
Sum Sq. Dev.	19215.06	1.780805	112995.6
Observations	85	85	85
Cross sections	17	17	17

Source: Data Processing in EViews 10 (2021)

Descriptive data for the variable Profit Quality with the highest value is in company IIKP in 2019. $IIKP = \frac{624782}{85544158} = 136.9200$ for the variable Profit Quality with the lowest value is in company SKMB $= \frac{-1332400}{17012389} = -12.7700$ SKMB in 2018. Descriptive data for the variable Company Size with the highest value is in company ALTO in 2016. $ALTO = 1165093632 \times 20.8761 = 3.0400000$ Descriptive data for the variable Company Size with the lowest value is in company ALTO in 2015. $ADES = 653224 \times 13.3897 = 2.590000$. Descriptive data for the variable Capital Structure with the highest value is in company ULTJ in 2015. $ULTJ = \frac{74.249016}{27.97505} = 265.4116$. Descriptive data for the variable Capital Structure with the lowest value is in company $x = \frac{12.858662}{31.9021762} = 0.040307$.

1. Estimation of Panel Data Model

a) Common Effect Model (CEM)

From the calculation results using the Pooled Least Squares estimation method with a common intercept, using EViews 10 software, the obtained results are as follows:

Table 2. Common Effect Model (CEM)

Dependent Variable: KL?
 Method: Pooled Least Squares
 Date: 08/20/21 Time: 15:17
 Sample: 2015 2019
 Included observations: 5
 Cross-sections included: 17
 Total pool (balanced) observations: 85

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-64.92591	31.46843	-2.063208	0.0423
SIZE?	24.31845	11.18661	2.173889	0.0326
DER?	-0.007144	0.044409	-0.160874	0.8726
R-squared	0.055795	Mean dependent var		3.286118
Adjusted R-squared	0.032765	S.D. dependent var		15.12451
S.E. of regression	14.87467	Akaike info criterion		8.271852
Sum squared resid	18142.97	Schwarz criterion		8.358063
Log likelihood	-348.5537	Hannan-Quinn criter.		8.306529
F-statistic	2.422755	Durbin-Watson stat		1.036497
Prob(F-statistic)	0.095000			

Source: Data Processing in EViews 10 (2021)

Based on Table 2 above, the estimation results using Pooled Least Squares with a common intercept show significant variables at a 5% level of significance. Specifically, the company size variable (SIZE) has a coefficient of 24.318, which is greater than 0.0326, while the capital structure variable (DER) has a coefficient of -0.007, which is

less than 0.8726. This suggests that the Pooled Least Squares method with a common intercept, considering the variations in independent variables in this study, can explain approximately 55% of the variation in the dependent variable, Quality of Data (KL), for trading, service, and investment companies listed on the Indonesia Stock Exchange. The remaining 45% is attributed to other variables not included in this study.

b) Fixed Effect Model (FEM)

Subsequently, the author estimates the research data using the Pooled Least Squares with a Fixed Effect Model.

Table 3. Fixed Effect Model (FEM)

Dependent Variable: KL?
 Method: Pooled Least Squares
 Date: 08/20/21 Time: 15:25
 Sample: 2015 2019
 Included observations: 5
 Cross-sections included: 17
 Total pool (balanced) observations: 85

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.08747	327.7203	0.042986	0.9658
SIZE?	-3.837189	116.7226	-0.032874	0.9739
DER?	-0.004513	0.054851	-0.082282	0.9347
Fixed Effects (Cross)				
_ADES—C	-3.441984			
_CEKA—C	-3.375687			
_ICBP—C	-2.351054			
_SKMB—C	-6.534136			
_SKLT—C	2.758281			
_STTP—C	-2.823921			
_INDF—C	-2.064791			
_ROTI—C	-3.150570			
_MYOR—C	-2.783254			
_ALTO—C	3.148958			
_PSDN—C	-1.719951			
_DLTA—C	-2.987421			
_TBLA—C	-2.593484			
_IIKP—C	33.20854			
_MGNA—C	-0.212689			
_MLBI—C	-2.480329			
_ULTJ—C	-2.596504			
Effects Specification				

Source: Data Processing in EViews 10 (2021)

Based on Table 3 above, it can be observed that the estimation results of the equation using the Fixed Effect Model for Profit Quality (KL) in the manufacturing sub-sector of food and beverage companies listed on the Indonesia Stock Exchange yield an R-square of 30.8%. From the equation results, it is evident that the independent variables can influence/explain the dependent variable KL by 30.8%, while the remaining 69.2% is influenced by other variables not included in this study.

c) Random Effect Model (REM)

The estimated results using the Random Effects Model (REM) with Generalized Least Squares are as follows:

Table 4. Random Effect Model (REM)

Dependent Variable: KL?
 Method: Pooled EGLS (Cross-section random effects)
 Date: 08/20/21 Time: 15:31
 Sample: 2015 2019
 Included observations: 5
 Cross-sections included: 17
 Total pool (balanced) observations: 85
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-64.54012	39.15346	-1.648389	0.1031
SIZE?	24.17695	13.92098	1.736728	0.0862
DER?	-0.005464	0.046124	-0.118452	0.9060
Random Effects (Cross)				
_ADES—C	0.884667			
_CEKA—C	0.469071			
_ICBP—C	-1.459715			
_SKMB—C	-0.868617			
_SKLT—C	-1.035227			
_STTP—C	0.209073			
_INDF—C	-2.039958			
_ROTI—C	-0.276637			
_MYOR—C	-1.126352			
_ALTO—C	-1.408770			
_PSDN—C	-3.108681			
_DLTA—C	0.630514			
_TBLA—C	-0.976995			
_IJKP—C	11.84751			
_MGNA—C	-1.874131			
_MLBI—C	0.329100			
_ULTJ—C	-0.194847			
Effects Specification				
		S.D.	Rho	
Cross-section random		5.359195	0.1248	
Idiosyncratic random		14.19283	0.8752	
Weighted Statistics				
R-squared	0.037070	Mean dependent var	2.510826	
Adjusted R-squared	0.013584	S.D. dependent var	14.12178	
S.E. of regression	14.02553	Sum squared resid	16130.67	
F-statistic	1.578397	Durbin-Watson stat	1.165774	
Prob(F-statistic)	0.212509			
Unweighted Statistics				
R-squared	0.055775	Mean dependent var	3.286118	
Sum squared resid	18143.34	Durbin-Watson stat	1.036453	

Source: Data Processing in EViews 10 (2021)

Based on the results in Table 4 above, it can be concluded that the estimation results of the Profit Quality (KL) equation in the manufacturing companies' food and beverage sub-sector listed on the Indonesia Stock Exchange using the Random Effects Model (REM) with generalized least squares show an R-square of 55%. This means that the independent variables can influence/explain the dependent variable KL by 55%, while the remaining 45% is influenced by other variables not included in this study.

2. Model Specification Test

a) Uji Chow

Table 5. Chow Test

Redundant Fixed Effects Tests
Pool: POOLDATA
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.504243	(16,66)	0.1250
Cross-section Chi-square	26.427268	16	0.0483

Source: Data Processing in EViews 10 (2021)

Based on the results of the Chow test in Table 4.5, it is observed that the "Cross-section Chi-square" row in the probability column has a value of 0.0483. Since the probability value of $0.0483 < 0.05$, which means that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. Therefore, the estimation model used is the Fixed Effect Model, which is superior to the Common Effect Model (CEM).

b) Hausman Test

Table 6. Hausman Test

Correlated Random Effects - Hausman Test
Pool: POOLDATA
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.078189	2	0.9617

Source: Data Processing in EViews 10 (2021)

Based on the results of the Hausman Test in Table 4.6, it is observed that the probability value is 0.9617, which is greater than 0.05. Therefore, the estimation model used is the Fixed Effect Model (FEM).

3. Panel Data Regression Analysis

Panel data regression analysis is conducted to determine the influence of Company Size and Capital Structure on Profit Quality in manufacturing companies within the food and beverage sub-sector listed on the Indonesia Stock Exchange. Based on the model selection results, it can be concluded that the best model is the Common Effect Model (CEM). According to Table 2, the panel data regression equation obtained is as follows:

$$KL = -64.92591 + 24.31845SIZE - 0.007144DER + e.$$

From the regression analysis of the company, the following explanations can be provided:

- 1) The constant value of -64.92591 indicates that if the independent variable has a value of zero, the Profit Quality (KL) will be -64.92591%. This implies that factors not considered in this study may influence each dependent variable.
- 2) The coefficient for SIZE (X1) is 24.31845, meaning that a 1% change in SIZE will result in a 24.31845% increase in Profit Quality.
- 3) The coefficient for the debt to equity ratio (X2) is -0.007144, signifying that a 1% change in the debt to equity ratio will lead to a -0.0071447% change in Profit Quality.

4. Hypothesis Testing

a) Partial Significance Test (t-test)

The T-test is conducted to determine the statistical significance of regression coefficients on a partial basis. It is used to examine the partial influence among independent variables on the dependent variable, assuming that other variables are held constant. Generally, the T-test indicates the significance of individual variables in explaining the variation in the dependent variable at a 5% significance level (Rusiadi, 2013).

Based on Table 2, the following observations can be made:

- 1) The calculated t-statistic for Company Size (SIZE) is 2.173889, which is greater than the tabulated t-value of 1.66342, with a significant probability of 0.0326 (less than the significance level $\alpha = 0.05$). Therefore, it can be concluded that the null hypothesis (Ho) is rejected, and the alternative hypothesis (H1) is accepted. This indicates that, on a partial basis, Company Size (X1) has a positive and significant impact on Profit Quality.
- 2) The calculated t-statistic for Debt to Equity Ratio (DER) is -0.007144, which is less than the tabulated t-value of 1.66342, with a significant probability of 0.8726 (greater than the significance level $\alpha = 0.05$). Consequently, the null hypothesis (Ho) is accepted, and the alternative hypothesis (H1) is rejected. This suggests that, on a partial basis, Debt to Equity Ratio (X2) has a negative and significant impact on Profit Quality.

b) Simultaneous Significance Test (F-test)

The Simultaneous Significance Test (F-test) aims to determine the joint statistical significance of regression coefficients. The F-test assesses the simultaneous influence of

the independent variables, Company Size, and Debt to Equity Ratio, on the dependent variable Profit Quality. Based on Table 2, the calculated F-statistic is 2.422755, which is greater than the critical F-value of 2.72, with a significant probability of 0.095000 (greater than the significance level of 0.05).

Therefore, it can be concluded that the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. This suggests that, jointly, the independent variables, Company Size (X_1) and Debt to debt-to-equity ratio (X_2), do not have a significant impact on Profit Quality (Y).

c) The Coefficient of Determination (R-squared) Test

The Coefficient of Determination (R-squared) Test is conducted to understand the strength of the independent variables in explaining the dependent variable. This analysis is used to determine the percentage of the variation in the dependent variable that can be explained by changes in the independent variables. Based on Table 2 above, the R-squared value is 0.055795, indicating that all independent variables, Company Size, and Debt to Equity Ratio, collectively influence/explain 55% (0.055795) of the variation in the dependent variable, Profit Quality. The remaining 45% is influenced by other factors not accounted for in this study.

CONCLUSION AND RECOMMENDATION

After conducting model selection using the Chow test and Hausman test, the most appropriate method is the Fixed Effect Model (FEM), as indicated by the Cross-section Chi-square value of $0.0483 < 0.05$. This means that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted, confirming the use of the Fixed Effect Model.

The t-test results reveal that for Company Size (SIZE), the calculated t-statistic is 2.173889, which is greater than the tabulated t-value of 1.66342, with a significant probability of $0.0326 < 0.05$. Therefore, it can be concluded that the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. This indicates that, on a partial basis, Company Size (X_1) has a positive and significant impact on Profit Quality.

However, for the Debt to Equity Ratio (DER), the calculated t-statistic is -0.007144, which is less than the tabulated t-value of 1.66342, with a significant probability of $0.8726 > 0.05$. Consequently, the null hypothesis (H_0) is accepted, and the alternative hypothesis

(H1) is rejected. This suggests that, on a partial basis, Debt to Equity Ratio (X2) has a negative impact but is not significant in influencing Profit Quality.

Investors are advised to pay close attention to the disclosure of information in company financial statements to make informed investment decisions. It is highly likely that some companies may engage in earnings management to present significant profits in financial statements.

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