

# The Influence of Liquidity, Leverage, Profitability, Growth Opportunity, Firm Size, and Profit Growth on Earning Response Coefficient with Institutional Ownership as a Moderation Variable

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## ABSTRACT

This study aims to examine the effect of each variable liquidity ratio, leverage ratio, profitability ratio, growth opportunities, firm size, and profit growth on the earning response coefficient with ownership as a moderating variable.

The research method used in this study is quantitative and serves as a verification descriptive study. The population in this study is the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2016-2020. The sampling technique used the purposive sampling method to obtain 18 food and beverage companies that match the criteria. The data analysis technique was carried out by panel data regression analysis using fixed effects, and the hypothesis was tested using the t-test.

The results show that the liquidity ratio, growth opportunities, firm size, and profit growth partially have a negative and insignificant effect on the earnings response coefficient. The ratio of leverage and profitability partially and significantly affects the earnings response coefficient. Furthermore, the study results show that institutional ownership can moderate the relationship between liquidity ratios, leverage ratios, profitability ratios, growth opportunities, firm size, and profit growth to the earning response coefficient.

**Keywords:** liquidity ratio, leverage ratio, profitability ratio, growth opportunities, firm size, profit growth, institutional ownership, earning response coefficient.

## INTRODUCTION

A corporate business entity is responsible for providing information regarding the efficiency of the company's performance to the parties concerned, namely internal parties and external parties of the company. The main means that companies can use is to use financial statements. Financial reports are expected to provide an overview of the company's performance and management's ability to manage the company. The financial information provided in the financial statements is important information that can influence the decisions of users of financial statements, especially for external parties, for example, decisions to buy, sell or keep investments in the company.

In fulfilling the basic concepts and principles of preparing financial statements, companies must pay attention to investor responses and market responses to published financial statements. Responses that appear can be in the form of good and bad news. The response is reflected through the earnings response coefficient (ERC). The capital market's reaction to earnings information can be measured using ERC. ERC is the magnitude of the slope coefficient in the regression that connects profit as one of the independent variables and returns as the dependent variable (Hartono, 2008). ERC can indicate or explain differences in market reactions to

earnings information announced by the company.

Inefficient market conditions, a positive abnormal return will trigger an increase in stock trading volume and vice versa. A negative abnormal return can trigger a decrease in stock trading volume. For ERC investors, it is important to make decisions related to earnings information with returns because a high ERC provides more information and quality reported earnings.

Currently, 30 food and beverage companies are listed on the Indonesia Stock Exchange. None of the thirty companies was delisted starting from 2016 to 2020. Manufacturing companies, especially the food and beverage sub-sector, are engaged in manufacturing products sold to make a profit or profit. Indonesia's food and beverage industry has great potential because people need food and drink to be consumed daily. It is a great opportunity in the business sector in the food and beverage industry.

**Table 1. The phenomenon of Earnings Response Coefficient**

| Issuer code                       | Measurement Period | T-2   | T-1    | T0     | T1    | T2    |
|-----------------------------------|--------------------|-------|--------|--------|-------|-------|
| Mayora Indah Tbk (MYOR)           | 2020               | 2.050 | 2.657  | 2.010  | 2.698 | 2.025 |
| Indofood Sukses Makmur (INDF)     | 2020               | 7.633 | 7.528  | 7.925  | 6.890 | 6.254 |
| Indofood CBP Sukses Makmur (ICBP) | 2020               | 9.156 | 10.376 | 11.802 | 9.430 | 8.676 |

Source: [www.idx.co.id](http://www.idx.co.id) (accessed March 25, 2022)

The above phenomenon can be concluded that the development of stock prices in the 2018-2022 period in food and beverage manufacturing companies fluctuated. Each period is explained that T-2 is two years before the measurement period. T-1 is one year before the measurement period. T0 is the year of the measurement period. T1 is one year after the measurement period, and T2 is two years after. Stock price fluctuations can lead to reduced investor confidence to invest or invest. Based on stock price fluctuations that often occur, this can be said to be influenced by company performance and macroeconomic factors.

## LITERATURE REVIEW

### Earnings Response Coefficient (ERC)

ERC is the magnitude of the slope coefficient in the regression that connects profit as one of the independent variables and returns as the dependent variable (Hartono, 2008). Susanto (2012) defines ERC as a measure of the abnormal return of a security in response to the unexpected earnings component reported by the company that issued the security.

Earning response coefficient can indicate or explain differences in market reactions to earnings information announced by the company (Hartono, 2008). Cumulative abnormal return is a proxy for stock prices, and unexpected earnings are for accounting profit. Then the regression will produce an ERC.

ERC is a coefficient obtained from the regression between CAR and EU. The regression will generate ERC in each sample and be used for the next analysis. To calculate the ERC, use the following equation:

$$CAR_{it} = \alpha_0 + \alpha_1 UE_{it} + \varepsilon_{i,t}$$

Information :

$CAR_{it}$  : the company's cumulative abnormal return during the observed period

$\alpha_1$  : profit response coefficient

$UE_{it}$  : unexpected earnings

$\varepsilon_{i,t}$  : error component in the model for the firm I in period t

### Liquidity

Liquidity is a measure to evaluate the ability to meet short-term obligations (Subramanyam, 2014). The liquidity ratio is a ratio that describes the company's ability to meet short-term (debt) obligations (Weston in Kasmir, 2015). Meanwhile, according to Kasmir (2015), the liquidity ratio, also called the working capital ratio, is a ratio used to measure a company's liquidity. It means that when the company is billed for maturing debt, by assessing this liquidity ratio, we can see its ability to finance and fulfill its obligations. If the company can fulfill its obligations (debt), then it can be said to be

in a liquid state. Otherwise, the company is in an illiquid state if it cannot fulfill it. The theory that reflects the relationship between the liquidity ratio and the earnings response coefficient is the signal theory, which explains that the sending party (the owner of the information) gives a signal or signal in the form of information that reflects the condition of a company that is beneficial to the recipient (investor).

In this study, the liquidity ratio is measured using the current ratio. The current ratio is a ratio to measure the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety. The current ratio is calculated by comparing the total current assets with the total current debt. The formula used is as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

From the measurement results, if the current ratio is low, it can be said that the company lacks the capital to pay debts, but if the measurement results are high, it is not necessarily a good company. A standard ratio is used, for example, the industry average for similar businesses.

### **Leverage**

Leverage is the use of assets and sources of funds by companies with fixed costs (fixed costs), meaning sources of funds originating from loans because they have an interest as a fixed expense to increase the potential profits of shareholders (Satriana, 2017). The leverage ratio measures the extent to which the company's assets are financed with debt. It means the amount of debt the company uses to finance its business activities when compared to using its capital. As is known, in funding its business, the company has several sources of funds. Sources of funds can be obtained from loans or own capital (Kasmir, 2015).

The theory that reflects the relationship between leverage and earnings response

coefficient is the trade-off theory. This theory explains that the higher the company's debt financing, the greater the risk of them experiencing difficulties. If the value of leverage is high, the market response will be bad, thereby reducing the value of the earning response coefficient. This study measures the leverage ratio using the debt-to-equity ratio. The debt-to-equity ratio is the ratio used to assess debt-to-equity. This ratio is useful for knowing the number of funds provided by creditors with company owners. The ratio is sought by comparing all debt, including current debt with equity, so the formula used is as follows:

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

For companies, the higher the resulting ratio, the better. If the resulting ratio is low, the level of funding provided by the owner and the security limit for the borrower in the event of a loss or depreciation of the asset value is higher.

### **Profitability**

Profitability is the net result of a series of policies and decisions. Calculating various relevant benchmarks determines profitability (Brigham & Houston, 2006). This study uses the profitability ratio to assess the company's ability to seek profit or profit within a certain period. This ratio also measures the effectiveness of a company's management as indicated by the profit generated from sales or investment income (Kasmir, 2015). The company's profitability is good if it can meet its profit target by using its assets or capital.

In this study, the profitability ratio is measured using the return on assets indicator, then the formula used is:

$$\text{Return on asset} = \frac{\text{earning after interest and tax}}{\text{total asset}}$$

### **Growth Opportunities**

Growth opportunities are opportunities for companies to invest in profitable things. The

notion of growth in financial management generally shows an increase in the size of the scale (Harahap, 2012). Meanwhile, according to Kasmir (2015), company growth describes its ability to maintain its economic position during economic growth and its business sector. The company's growth includes sales growth, net profit growth, earnings per share growth, and dividend income per share.

The theory that describes the relationship between growth opportunities and earnings response coefficient is the signal theory, which explains that the sender (the owner of the information) gives a signal or signal in the form of information that reflects the condition of a company's growth that is beneficial for market psychology. It means that increasing growth opportunities will lead to a good market response, thereby increasing the value of the earning response coefficient.

In this study, the growth of this company is measured by Price Book Value (PBV). It is based on the consideration that the entire sample of companies is a manufacturing company in the food and beverage sub-sector listed on the IDX so that data to measure company growth with the company's market value is easier to obtain and be sampled.

$$PBV = \frac{HS_{it}}{\text{Equity per Share}}$$

Information:

HS<sub>it</sub>: closing stock price of company I in period t

equity per share: book value of company I equity in period t per share

If the PBV value > 1, investors will have more confidence in the company that will continue to experience growth.

### **Firm Size**

Firm size is a scale that can determine the size of a company in various ways, including total assets, total sales, total capital, market capitalization value, log size, stock market

value, and others. Grouping companies based on the scale of operation (large and small) can be used by investors as one of the variables in determining investment decisions (Siregar, 2010).

The theory that describes the relationship between firm size and earning response coefficient is the signal theory, namely, explaining that the sender (the owner of the information) gives a signal or signal in the form of information that reflects the condition of company size that is beneficial for market psychology. It means that if the firm size is high or good, it will lead to a good market response, thereby increasing the value of the earning response coefficient. In this study, company size is formulated as follows:

$$\text{Firm Size} = \ln \text{Total Assets}$$

### **Profit Growth**

According to Manurung & Kartikasari (2017), profit growth is a ratio that shows the ability of a company to increase net income from the previous year. According to Hapsari et al. (2017), profit growth is the change in the percentage increase in profit earned by a company. From these two definitions, the researcher concludes that profit growth indicates a percentage increase in company profits compared to the previous period. Good profit growth reflects that the company is in good financial condition, which can increase its value. In addition, profit growth can also be used as a measure of a company's performance, so the higher the profit earned by the company, the better the company's performance (Hapsari et al., 2017).

The theory that describes the relationship between profit growth and earning response coefficient is the signalling theory. It means that if profit growth is high, it will lead to a good market response, thereby increasing the value of the earning response coefficient. Profit growth can be proxied by calculating how much the company's profit increases compared to the previous year. The method is that the previous period's profit reduces

the current period's profit and then is divided by the previous period's profit.

The formula for calculating profit growth is as follows:

$$\text{Profit Growth} = \frac{\text{net profit year } t - \text{net profit year } t - 1}{\text{net profit year } t - 1}$$

Information:

Year t: now

Year t-1: the previous year

### **Ownership Institutional**

Institutional ownership is part of the company's shares owned by institutional investors, such as insurance companies, financial institutions (banks, financial companies, credit), pension funds, investment banking, and other companies related to the category (Yang et al., 2009). Jensen & Meckling (1976) stated that institutional ownership has a very important role in minimizing agency conflicts that occur between owners (principals) and managers (agents). The existence of institutional investors is considered capable of being an effective monitoring mechanism in every decision taken by managers. It is because institutional investors make strategic decisions that affect earnings quality.

In this study, institutional ownership is used as a moderating variable. One of the company's shareholders is the management, where the management will tend to increase the company's value with the company's growth opportunities that tend to rise so that the management will try to prioritize the interests of the owner of the company in the proportion of ownership. The higher the institutional ownership, the stronger the positive signal between liquidity, leverage, profitability, and growth opportunities with the earnings response coefficient.

### **Previous Research Review**

Dewi (2017) studied 50 manufacturing companies listed on the IDX for 2013-2014, and Cheng (2010) on 14 banking companies listed on the China Stock Exchange for 2002-2008, showing that liquidity has a positive effect on ERC.

Meanwhile, Dira (2014) researched 33 manufacturing companies listed on the IDX for 2009-2011, stating that liquidity negatively affects ERC.

Research conducted by Mulyani (2007) on 255 companies listed on the JSE for 2001-2015 shows that leverage significantly affects ERC. However, in contrast to research conducted by Paramita (2012) on 20 manufacturing companies listed on the BEI for the period 2005-2009 and research by Radchobeh (2012) on 140 companies listed on the Tehran Stock Exchange for the period 2004-2010, it shows that leverage does not affect ERC. The same results obtained from Hasanzade's (2013) research on 202 companies listed on the Tehran Stock Exchange for the period 2006-2012 show that leverage has a negative effect on ERC.

Setiawati's (2014) research on 97 manufacturing companies listed on the IDX for 2009-2011 shows that profitability affects ERC. However, Fajar's (2016) research on 28 banking companies listed on the IDX for 2010-2014 shows that profitability does not significantly affect ERC.

Rofika's (2015) research on 85 manufacturing companies listed on the Indonesia Stock Exchange for 2012 and Hasanzade's (2013) research shows that company growth significantly affects ERC. However, Setiawati's (2014) research shows that company growth does not affect ERC.

Research conducted by Zakaria (2012) on 334 companies listed on the Malaysian Stock Exchange in 2002-2007 and Mulyani (2007) shows that firm size significantly affects ERC. However, Rofika's (2015) and Paramita's (2012) research shows that firm size has no significant effect on ERC.

Mashayekhi & Aghel (2016) stated that profit growth affects ERC. The higher the profit growth, it can be considered that the company has good financial performance. With good financial performance, the response given by the market will be

positive. In contrast to the research conducted by Kadek & Bagus (2014), profit growth does not affect ERC.

The research results by Panda & Leepsa (2019) prove that institutional ownership significantly affects financial performance in the Indian stock market. In line with the research of Brickley et al. (1988), Cornett et al. (2007), Elyasiani & Jia (2010), and Lin & Fu (2017).

## Framework

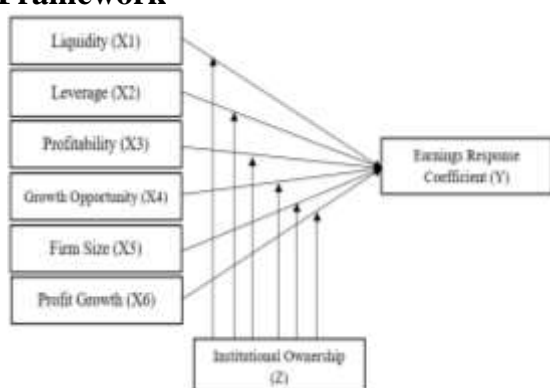


Figure 1. Framework

H1: Liquidity Ratio has a positive effect on Earnings Response Coefficient.

H2: Leverage ratio has a negative effect on Earnings Response Coefficient.

H3: The profitability ratio has a positive effect on Earnings Response Coefficient.

H4: Growth Opportunities have a positive effect on Earnings Response Coefficient

H5: Firm Size has a positive effect on Earning Response Coefficient.

H6: Profit Growth has a positive effect on the Earning Response Coefficient.

H7: Institutional Ownership can moderate the relationship between Liquidity, Leverage, Profitability, Growth Opportunities, Firm Size, and Profit Growth with Earnings Response Coefficient.

## MATERIALS & METHODS

The type of research conducted in this research is descriptive research. Descriptive research is conducted to discover and explain the characteristics of the variables studied in a situation (Sekaran, 2011). This study uses a

quantitative approach to research data in the form of numbers and analysis using statistics.

The population is a generalization area consisting of objects or subjects with certain qualities and characteristics determined by researchers to be studied, and then conclusions are drawn (Sugiyono, 2016). The population in this study is the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange, with as many as 30 companies.

Determination of the sample in this study was carried out using a purposive sampling technique. The purposive sampling technique is a sampling technique with certain considerations (Indrawati, 2015). The criteria set in the sampling of this study are as follows:

1. Food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange during 2016-2020.
2. Food and beverage sub-sector manufacturing companies that were not IPO and delisted during the 2016-2020 period.
3. Manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange for the 2016-2020 period use Rupiah in their financial statements.
4. Manufacturing companies in the food and beverage sub-sector consistently present financial reports for the observation period and have been listed on the Indonesia Stock Exchange for the 2016-2020 period.

Based on the criteria for selecting the research sample set above, 90 samples were obtained (18 companies x 5 years of research). The data analysis used in this study is Eviews 12.

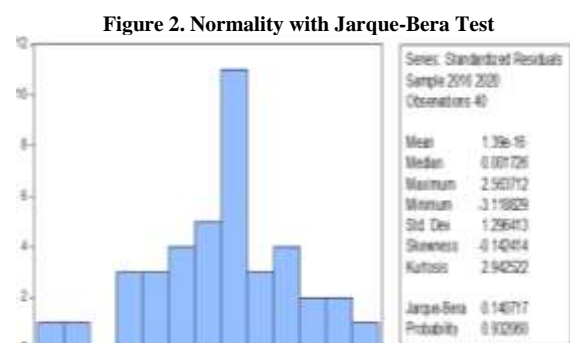
## RESULT

### A. Classic assumption test

#### 1. Normality test

The normality test aims to test whether the nuisance or residual variable has a normal

distribution in the regression model. There are two ways to detect residuals with a normal distribution: graphic analysis and the Jarque Bera Statistical test. In this study, the statistical test used in testing normality is the Jarque Bera Test. If the probability value of the JB test  $> 0.05$ , then  $H_0$  is received, or the data is normally distributed. However, if the test results  $< 0.05$ ,  $H_0$  is rejected, meaning data is not normally distributed (Ghozali, 2017).



Source: Secondary data processed (2022)

The table above shows that the value of probability is  $0.932060 > 0.05$ . It means that the data of this study has been normally distributed, so it can be said that the regression model is feasible to use and can be used for further testing.

## 2. Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between the independent variables (X) (Ghozali, 2018). Multicollinearity means a strong relationship exists between several or all independent variables in the regression model. The variance inflation factors (VIF) and tolerance values test the presence or absence of multicollinearity between independent variables. If the tolerance value is  $< 0.10$  or the VIF value is  $> 10$ , multicollinearity occurs. If tolerance  $> 0.10$  or VIF value  $< 10$ , multicollinearity is rejected.

Table 2. Multicollinearity Test

| Variable | Coefficient Variance | Uncentered VIF | Centered VIF |
|----------|----------------------|----------------|--------------|
| C        | 3.61E-07             | 111.6795       | NA           |
| X1       | 7.05E-13             | 1.895613       | 1.864378     |
| X2       | 4.74E-09             | 2.988200       | 1.269455     |
| X3       | 4.13E-07             | 2.983374       | 2.166491     |
| X4       | 1.95E-16             | 2.506347       | 2.189242     |
| X5       | 4.47E-10             | 93.78273       | 1.291626     |
| X6       | 5.81E-10             | 2.057947       | 2.051622     |
| Z1       | 6.00E-08             | 5.634506       | 1.192227     |

Source: Secondary data processed (2022)

The table above shows that the tolerance value for all variables is above 0.1, and the VIF value is below 10. So it can be concluded that there is no correlation between the independent variables used or there are no problems in the multicollinearity test.

## B. Testing Data Analysis Requirements

### 1. Descriptive Statistical Analysis

Descriptive statistical analysis is the statistics used in analyzing data by describing or describing the data that has been collected. This analysis aims to provide a picture or describe data in variables seen from the average, minimum, maximum, range, and standard deviation.

Table 3. Descriptive Statistical Test

|              | X1       | X2        | X3        | X4        | X5        | X6        | Z1       | Y1        |
|--------------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|
| Mean         | 11.99408 | 1.092890  | 0.879905  | 2289.647  | 25.81937  | 0.187510  | 0.488040 | 2.84E-05  |
| Median       | 1.522417 | 1.028915  | 0.852523  | 273.5481  | 27.30536  | 0.120846  | 0.404067 | -2.61E-06 |
| Minimum      | 863.7847 | 5.370885  | 0.687168  | 30168.22  | 30.61377  | 21.35923  | 0.919140 | 0.004372  |
| Maximum      | 0.152175 | -2.114788 | -0.120010 | -124.2041 | 20.47982  | -15.66856 | 0.087706 | -0.001386 |
| Std. Dev.    | 92.04744 | 0.819553  | 0.130955  | 6048.796  | 3.073000  | 1.390311  | 0.254717 | 0.000390  |
| Skewness     | 9.322789 | 0.715244  | 2.109852  | 3.821856  | -0.341966 | 1.000012  | 0.222205 | 5.884252  |
| Kurtosis     | 87.84718 | 0.284707  | 9.184785  | 16.74128  | 1.666135  | 26.03521  | 1.842388 | 42.91751  |
| Jarque-Bera  | 2000.81  | 112.8382  | 224.7332  | 927.1000  | 8.625481  | 2043.697  | 5.765389 | 6495.184  |
| Probability  | 0.000000 | 0.000000  | 0.000000  | 0.000000  | 0.014816  | 0.000000  | 0.035984 | 0.000000  |
| Sum          | 1076.785 | 97.17749  | 7.186818  | 206088.3  | 2127.343  | 18.87670  | 44.00458 | 0.022558  |
| Sum Sq. Dev. | 768091.2 | 77.81487  | 1.926285  | 1.28E+08  | 840.4961  | 1828.621  | 5.750394 | 3.10E-07  |
| Observations | 90       | 90        | 90        | 90        | 90        | 90        | 90       | 90        |

Source: Secondary data processed (2022)

## 2. Panel Data Regression Analysis

### Panel Data Regression Model Selection Method

The selection of the most appropriate panel data regression model is used in managing panel data. Several tests can be done, with the Chow Test (Common Effect vs Fixed Effect), Hausman Test (Fixed Effect vs Random Effect), and Lagrange Multiplier Test (Random Effect vs Common Effect).

The following is the selection of research models:

**a) Chow Test (Likelihood Test Ratio)**

The Chow Test was carried out to determine whether the Panel Data Regression Technique with the Fixed Effect method was better than the regression of the Dummy Data Model without the Dummy Variable (Common Effect). The results of the Chow Test test calculation are as follows:

**Table 4. Chow Test (Likelihood Test Ratio) Result**

| Effects Test             | Statistic | d.f.    | Prob.  |
|--------------------------|-----------|---------|--------|
| Cross-section F          | 3.303229  | (17,65) | 0.0003 |
| Cross-section Chi-square | 56.041435 | 17      | 0.0000 |

Source: Secondary data processed (2022)

Based on testing, the table above shows that the probability value of the chi-square cross-section is 0,0003, whose value is <0.05, then receive H1 with a hypothesis:

H0: Choose to use the Common Effect Model estimation model

H1: Choose to use the Fixed Effect Model estimation model

So it can be concluded that the estimated model that can be used is the fixed effect model compared to the Common Effect Model.

**b) Multiplier Lagrange Test**

The multiplier Lagrange test is carried out to determine whether the panel data with the random effect model is better than the common effect model. The results of the calculation of multiplier Lagrange testing are as follows:

Based on testing, the table 5 shows that the probability Breusch-Pagan (BP) value is 0.3340, whose value is >0.05, then receive H0 with a hypothesis:

H0: Choose to use the Common Effect Model estimation model

H1: Choose to use the Random Effect Model estimation model

So, it can be concluded that the estimated model that can be used is the Common Effect Model compared to the Random Effect Model.

**Table 5. Multiplier Lagrange Test Results**

|                      | Test Hypothesis      |                      |                       |
|----------------------|----------------------|----------------------|-----------------------|
|                      | Cross-section        | Time                 | Both                  |
| Breusch-Pagan        | 0.058981<br>(0.8081) | 0.874513<br>(0.3497) | 0.933494<br>(0.3340)  |
| Honda                | 0.242861<br>(0.4041) | -0.935154<br>--      | -0.489525<br>--       |
| King-Wu              | 0.242861<br>(0.4041) | -0.935154<br>--      | -0.735398<br>--       |
| Standardized Honda   | 1.031485<br>(0.1512) | -0.721458<br>--      | -3.807241<br>--       |
| Standardized King-Wu | 1.031485<br>(0.1512) | -0.721458<br>--      | -3.502283<br>--       |
| Gourieroux, et al.*  | --                   | --                   | 0.058981<br>(=> 0.10) |

Source: Secondary data processed (2022)

**c) Hausman Test**

The Hausman test was conducted to determine whether the panel data with the fixed effect model is better than the random effect model. The results of the calculation of thir testing are as follows:

**Table 6. Hausman Test Results**

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 32.051712         | 7            | 0.0000 |

Source: Secondary data processed (2022)

Based on testing, the table above shows that the probability cross-section random value of 0.0000, whose value is <0.05, which means significant with a 99% sygification level ( $\alpha = 5\%$ ) and uses the chi-square distribution (Gujarati, 2012). So that the decision taken through the Hausman test is to receive H1 with a hypothesis:

H0: Choose to use the Random Effect Model estimation model

H1: Choose to use the Fixed Effect Model estimation model



So, it can be concluded that the estimated model that can be used is the fixed effect model compared to the random effect model.

### Model Accuracy Test

Based on the three chow tests, multiplier Lagrange tests, and Hausman tests, it can be concluded that the Fixed Effect Model is more appropriate than the Common Effect Model and Random Effect Model. So, it can be said that the fixed effect model can be done in further testing.

#### a. Coefficient Of Determination (R Square)

Table 7. Coefficient Of Determination Test Results

| Cross-section fixed (dummy variables) |          |                       |           |
|---------------------------------------|----------|-----------------------|-----------|
| R-squared                             | 0.587282 | Mean dependent var    | 2.84E-05  |
| Adjusted R-squared                    | 0.434893 | S.D. dependent var    | 0.000590  |
| S.E. of regression                    | 0.000444 | Akaike info criterion | -12.37331 |
| Sum squared resid                     | 1.28E-05 | Schwarz criterion     | -11.67891 |
| Log likelihood                        | 581.7987 | Hannan-Quinn criter.  | -12.09329 |
| F-statistic                           | 3.853850 | Durbin-Watson stat    | 2.624692  |
| Prob(F-statistic)                     | 0.000008 |                       |           |

Source: Secondary data processed (2022)

The table above shows that the Adjusted R Square value is 0.403124. It means that the 43% Earnings Response Coefficient can be explained by the liquidity ratio (X1), leverage ratio (X2), profitability ratio (X3), Growth Opportunities (X4), Firm Size (X5), Profit Growth (X6), and Institutional Ownership (Z1), while the remaining 57% is explained by other variables that are not included in this research model.

#### b. Partial Test

Based on the table 8, it can be concluded that the ratio of liquidity, growth opportunities, firm size, and profit growth partially has a negative and insignificant effect on ERC. In contrast, the leverage and profitability ratio partially positively and significantly affects the ERC.

Table 8. Partial Test Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | 0.008362    | 0.005578   | 1.489189    | 0.1387 |
| X1       | -7.08E-08   | 7.32E-07   | -0.096519   | 0.9234 |
| X2       | 0.000139    | 9.43E-05   | 1.477592    | 0.1443 |
| X3       | 0.002098    | 0.000704   | 2.981701    | 0.0040 |
| X4       | -3.36E-08   | 3.88E-08   | -0.865553   | 0.3899 |
| X5       | -0.000395   | 0.000216   | -1.834036   | 0.0712 |
| X6       | 3.38E-05    | 2.28E-05   | 1.491242    | 0.1407 |
| Z1       | 0.003359    | 0.000711   | 4.725559    | 0.0000 |

Source: Secondary data processed (2022)

#### c. Moderation Regression Testing

Table 9. Moderation Regression Test Results

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -0.001953   | 0.000362   | -5.392900   | 0.0000 |
| X1       | -0.000111   | -0.036468  | 0.000000    | 0.9999 |
| Z1       | 0.003959    | 0.000749   | 5.283303    | 0.0000 |
| M1       | 0.000176    | 0.000273   | 0.644226    | 0.5216 |

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -0.002047   | 0.000369   | -5.546696   | 0.0000 |
| X2       | 0.000238    | 0.000153   | 1.552754    | 0.1251 |
| Z1       | 0.004293    | 0.000811   | 5.291702    | 0.0000 |
| M2       | -0.000506   | 0.000334   | -1.517251   | 0.1338 |

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -0.001556   | 0.000308   | -5.062556   | 0.0000 |
| X3       | -8.59E-05   | 0.000861   | -0.111531   | 0.9115 |
| Z1       | 0.002730    | 0.000644   | 4.241120    | 0.0001 |
| M3       | 0.005610    | 0.001690   | 3.319524    | 0.0014 |

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -0.001775   | 0.000335   | -5.295575   | 0.0000 |
| X4       | 8.55E-07    | 3.08E-07   | 2.794324    | 0.0067 |
| Z1       | 0.003089    | 0.000715   | 4.299989    | 0.0001 |
| M4       | -1.00E-06   | 3.81E-07   | -2.635162   | 0.0104 |

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | 7.22E-05    | 0.004540   | 0.015900    | 0.9874 |
| X5       | -8.88E-05   | 0.000174   | -0.497892   | 0.6202 |
| Z1       | 0.003743    | 0.000303   | 7.143975    | 0.0000 |
| M5       | -0.001630   | 0.000163   | -4.305629   | 0.0000 |

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -0.002028   | 0.000374   | -5.415985   | 0.0000 |
| X6       | 2.46E-05    | 3.79E-05   | 0.658149    | 0.5138 |
| Z1       | 0.004183    | 0.000747   | 5.597311    | 0.0000 |
| M6       | 3.44E-05    | 0.000116   | 0.295517    | 0.7677 |

Source: Secondary data processed (2022)

Based on the above table, institutional ownership can moderate the relationship between liquidity ratios, leverage ratios, profitability ratios, growth opportunities, firm size, and profit growth to earning response coefficient.

### CONCLUSION

The results of this study provide several conclusions that can be drawn based on the discussion of the problems that have been carried out. The following are the conclusions that the author has summarized in this study:

1. The liquidity ratio has a negative and

- insignificant effect on the Earning Response Coefficient in the Manufacturing Food and Beverage Subsector company listed on the Indonesia Stock Exchange for the 2016-2020 period.
2. The leverage ratio positively and significantly affects the Earnings Response Coefficient in the Manufacturing Food and Beverage Subsector company listed on the Indonesia Stock Exchange for the 2016-2020 period.
  3. The profitability ratio positively and significantly affects the Earning Response Coefficient in the Food and Beverage Sub-sector manufacturing company listed on the Indonesia Stock Exchange for the 2016-2020 period.
  4. Growth Opportunities have a negative and insignificant effect on Earning Response Coefficient in manufacturing companies of the food and beverage subsector listed on the Indonesia Stock Exchange for the 2016-2020 period.
  5. Firm Size has a negative and insignificant effect on Earning Response Coefficient in manufacturing companies of the food and beverage subsectors listed on the Indonesia Stock Exchange for the 2016-2020 period.
  6. Profit growth has a negative and insignificant effect on Earning Response Coefficient in manufacturing companies of food and beverage subsectors listed on the Indonesia Stock Exchange for the 2016-2020 period.
  7. Institutional ownership can moderate the relationship of liquidity ratios, leverage ratios, profitability ratios, growth opportunities, firm size, and profit growth to earning response coefficient in manufacturing companies of the food and beverage subsectors registered in the Indonesia Stock Exchange for the 2016-2020 period.

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