

THE EFFECT OF LEVERAGE, GROWTH OPPORTUNITIES AND PROFITABILITY ON EARNINGS RESPONSE COEFFICIENTS (Study on Consumer Goods Companies Listed on the Indonesia Stock Exchange 2015-2019)

Mikhael Tulus Pangidoan, Flourien Nurul Chusnah

Department of Accounting
Sekolah Tinggi Ilmu Ekonomi Indonesia
Jakarta, Indonesia

pangidoanmikhael@gmail.com ; flo@stei.ac.id

Abstract - *This study aims to determine the effect of leverage, growth opportunities and profitability variables on the earnings response coefficient in consumer goods sector companies listed on the Indonesia Stock Exchange (BEI). This study uses a causal associative research strategy, with a quantitative approach and data analysis methods using panel data regression analysis in Eviews 10 software. The population of this study is all consumer goods companies listed on the Indonesia Stock Exchange in 2015-2019. The sample was determined based on the purposive sampling method, in order to obtain a sample of 26 companies.*

This study uses the dependent variable, control variables and independent variables. The dependent variable in this study is leverage, growth opportunities and profitability, and the control variable in this study is firm size to the independent variable, namely the earnings response coefficient.

The results of this study indicate that partially leverage has a significant negative effect on the earnings response coefficient. However, growth opportunities and profitability have no effect on the earnings response coefficient. Simultaneously, leverage, growth opportunities and profitability affect the earnings response coefficient. The ability of the independent variable in explaining the dependent variable is 6.42%. The remaining 93.58% is explained by other variables not included in this study.

Keywords : *Leverage, Growth Opportunities, Profitability, Earnings Response Coefficient*

I. INTRODUCTION

In this era of globalization, many economic activities have used sophisticated technology and information in carrying out transaction activities that involve many parties. This has made the changes in the wheels of the economy grow quite rapidly, both in the international market and the domestic market. With the changes that are felt, the goals of the company can be easily achieved. For that, funds are needed in developing and obtaining profits that have an impact on the strength and survival of the company. The capital market is a place for companies to develop the business they run, and a place for long-term investment by investors.

The capital market is the impact of sophistication in the development of science, technology and information, especially in the business sector. The capital market has an important role for a country's economy because it has various functions, one of which is as a means of business funding for companies from investors (investors). The capital market is a place for buying and selling various long-term financial instruments such as bonds, stocks, mutual funds and various other financial instruments. According to Alifiana dan Praptiningsih (2016) with the capital market, parties that have excess funds (investors) can invest their funds in the hope of getting a return in the future, while the issuer (company) can use these funds for the benefit of the company.

Investors need an information component to be used as a reference in making investment decisions. For this reason, the company's financial statements become a complex part of the needs of investors where there is information about the background, performance and changes in the company's financial position. This is the obligation of every company listed on the Stock Exchange to provide information on company activities in the form of an annual report or financial statement. Financial statement are the main media that provide information and summarize in detail all company activities and are then given to company stakeholders .

Financial statement are used as a basis for predicting decision making. Besides, the information that comes from financial reports can also show the company's performance. Therefore, accounting information is very important for one part of the users of financial statements such as investors to consider investing in the capital market. The components in financial statements such as statements of financial position, income statements, changes in equity, cash flow statements, and notes to financial statements (CALK) have their respective benefits and functions. However, most investors will look at the performance of a company on the company's income statement, because they consider it more efficient to interpret the company's operating activities.

The income statement is a part of financial statements that investors are looking for in identifying and evaluating the performance of a company in making decisions to invest its capital. In addition, the report contains information regarding the details of the earnings (earnings) achieved by a company within a certain period of time. Profit is market information that is believed to be the main information because it can influence investors in making decisions to buy, sell or hold securities issued by companies (Rahayu & Suaryana, 2015). Information about earnings has an important influence on company performance, especially on stock prices. This is evidenced if there is an increase in stock prices, the earnings information presented in the financial statements from the previous period has increased, and vice versa (Alifiana dan Praptiningsih, 2016).

The consumer goods sector company is one of the sectors that is often the target of investors and debtors to be able to invest or lend funds. This sector is a strength in the capital market in the manufacturing industry which has resilience during good and bad economic conditions. Currently, Indonesia is experiencing a contraction in economic growth due to the COVID-19 virus pandemic, but the condition of companies in this sector shows stability in terms of stock trading and sales of respective commodities. This is because some of the commodities in this sector are goods that are consumed by the public in their daily activities which make the company's output stable. On the Bisnis.com (2020) explains, all sectors recorded negative performance in the first quarter of 2020, but the consumer goods sector was able to become the sector with the least correction rate and the most defensive among other sectors with a correction of 19.17%.

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To be able to determine quality financial reports in the consumer goods sector to be used as an analysis tool, information is needed about the profit of the company. Earning information is one of the instruments used by investors and potential investors to make investment decisions. Investors see that profit is an indicator of company performance and future returns (Delvira dan Nelvirita, 2013). The function of company earnings information is very limited and sometimes provides biased information. Information other than earnings is needed to assume the company's stock return. With the assumption that investors will assess current earnings to predict future earnings and returns, then the future return is increasingly risky if investors' reactions to the company's unexpected earnings are also lower (Santoso, 2015). Some researchers have found a coefficient used to measure the power of earnings information in influencing stock returns (informativeness of earnings) as measured by the earnings response coefficient (ERC).

Earnings response coefficient is a form of measuring information in earnings. According to Paramita (2012) earnings response coefficient is a tool for measuring how much market reaction is in responding to the profit figures reported by the company. Market reactions are decisions taken by users of financial statements based on information obtained from financial reports which is generally reflected in the actions of market participants. Market reactions are triggered by various things, one of which is announcements related to profits (Susanto, 2012). In other words, the earnings response coefficient is a measuring tool used by market players in measuring information on a profit from the company's financial statements, which will then cause further reactions and responses to the reported earnings figures.

By knowing the various kinds of factors that affect the earnings response coefficient, it can be seen that the probability of the share price is big or small on the earnings information of a company (Imroatussolihah, 2013). Based on several studies, there are factors that affect the earnings response coefficient, including leverage, profitability, growth opportunities and firm size.

Leverage is the amount of debt used to finance an asset belonging to the company. Harahap (2015) explains that the leverage ratio describes the relationship between corporate debt to capital and assets. This ratio can see how far the company is financed by debt or external parties with the company's ability as described by capital (equity). Companies that have high leverage, the profit owned by the company will be more dominant in flowing to creditors so that good news on profits will be given to creditors rather than shareholders. This makes the earnings response coefficient negatively affected by leverage because information on earnings announcements is reacted quickly by creditors, but is responded negatively by shareholders who think the company will prioritize debt payments rather than dividend payments (Delvira dan Nelvirita, 2013).

In the explanation of Hasanzade, Darabi, dan Mahfoozi (2013) the opportunity to grow a company is the company's ability to identify potential sources of funding for the company (both internal and external) to carry out investment activities and to provide appropriate financial planning for the company. Companies that have greater growth opportunities will have a high earnings response coefficient (Santoso, 2015). This opinion is supported by Fauzan dan Purwanto (2017), a company that continues to grow will attract a greater positive response from investors because the expectation of profits to be obtained from the company is higher so that it will increase the earnings response coefficient of the company. It can be concluded that the opportunity to grow a company can attract investors such as shareholders because of the assumption that the company will have stability and increase in terms of profits and make the returns that will be obtained will increase in the next period.

Profitability can also be a determining factor for the level of earnings response coefficients. Companies with a high level of profitability will show the company's ability to generate higher profits. This affects investors to invest in the company. In research conducted by Mahendra dan Wirama (2017) partially that profitability has a positive effect on the earnings response coefficient. In contrast to research conducted by Santoso (2015) that profitability has no effect on the earnings response coefficient.

In this study, using one control variable, namely firm size so that the variable leverage, company growth opportunities, and profitability to the earnings response coefficient variable cannot be influenced by external factors that are not examined. Company size is the company's ability to face uncertainty, so investors who are cautious (risk averse) tend to take into account the size of a company to be used by investors in making investment decisions (Indra, Zahron, dan Rosianawati 2011). According to Susanto (2012) large companies are considered to have more information available to investors in making decisions related to investing in company shares when compared to small companies.

With the background described above, the title taken in this study is **“THE EFFECT OF LEVERAGE, GROWTH OPPORTUNITIES AND PROFITABILITY ON EARNINGS RESPONSE COEFFICIENTS (Study on Consumer Goods Companies Listed on the Indonesia Stock Exchange 2015-2019)”**.

II. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Theoretical Framework

Financial Statement

Financial Statement is a structured presentation of the financial position and performance of a company. According to Hery (2015) financial statements are the final product of the collection of transaction data and a series of recording stages carried out by an accountant with the hope of being able to report any financial data so as to form financial reports that have been produced by an entity.

The purpose of financial reports is to provide information regarding the financial position, performance and changes in the financial position of a company that is useful for a large number of users in making economic decisions.

Capital market

According to (*Bursa Efek Indonesia*, 2018) the capital market is a market for various long-term tradable financial instruments, both debt securities (bonds), equity (stocks), mutual funds, derivative instruments and other instruments. The capital market is a means of funding for companies and other institutions (for example the government), and as a means for investing activities.

Market Efficiency Theory

An efficient market is a market where the prices of all traded securities reflect all available information (Alifiana and Praptiningsih, 2016). A market is said to be efficient if no-one, both individual investors and institutional investors, will be able to obtain the return is not normal (abnormal return), after adjusting for risk, using existing trading strategies or "stock prices reflect all available information".

Market efficiency is directly related to whether or not activities to attempt to predict price direction are relevant. The stock market or capital market can be categorized as an efficient market, this is based on the assumption that future prices only depend on the arrival of new, unknown information in the future.

Signaling Theory

Signaling theory is an idea where one party has an inherent information about that party and is conveyed to the other party. This theory is based on the occurrence of asymmetric information, namely the occurrence of deviations from perfect information Fauzan and Purwanto (2017). According to Syarifulloh dan Wahyudin (2016) this theory assumes that the information received by internal and external parties is different (information asymmetry). Internal parties are considered to have more accurate information about the company than external parties. The existence of this information asymmetry encourages companies to provide information both in the form of financial and non-financial statements (Alifiana and Praptiningsih, 2016).

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According to (Godfrey *et al.*, 2010) states the logical consequence of signal theory will be an incentive for all managers to signify future earnings expectations, if investors believe the signal, the share price will increase and shareholders will benefit. This theory explains the benefits that will be obtained in the form of an effect on increasing share prices in the market because many investors have positive expectations and choose the entity's shares. This theory is information provided by related companies to provide guidance to investors for decision making (Alifiana and Praptiningsih, 2016). Information published as an announcement will provide a signal for investors in making investment decisions. If the announcement contains a positive value, it is expected that the market will react when the announcement is received by the market.

Earnings Response Coefficient

According to Paramita (2012) earnings quality can be indicated as the ability of earnings information to respond to the market, in other words reported earnings have a power of response, a strong market reaction to earnings information as reflected in the high earnings response coefficient (ERC), indicates quality reported earnings. Earnings response coefficient is the coefficient obtained for unexpected earnings with abnormal returns. So the high and low quality of earnings information that the market responds to can be described by the earnings response coefficient (ERC), in other words, the better the information content, the higher the earnings response coefficient value (Sari *et al.*, 2018).

If investors have the opinion that financial information has a high level of credibility, investors will react to the financial statements. When the profit figures contain information, the market will react to the earnings announcement theorized. The strong market reaction to earnings information, which is reflected in the high earnings response coefficient (ERC), indicates that reported earnings are of quality. However, if the opposite is true, a low reaction will occur if the financial statements have questionable quality. The earnings response coefficient is a proxy for earnings quality (Santoso, 2015).

According to Susanto (2012) research on earnings response coefficients is useful in fundamental analysis by investors, in research models to determine market reactions to earnings information of a company. By knowing the factors that affect the earnings response coefficient, it can be seen that the probability of stock prices on earnings information is likely to be small.

Leverage

According to Harrison Jr *et al.* (2012) defines leverage as “the debt ratio indicating the proportion of a company's assets that are financed with debt. This ratio measures the company's ability to pay both current and long-term debt or total liabilities”.

Harahap (2015:306) explains that the leverage ratio describes the relationship between corporate debt to capital and assets. Leverage is usually used to describe a company's ability to use assets or funds that have fixed expenses to increase the level of income for company owners, which will make the uncertainty of the return that will be higher (Delvira and Nelvirita, 2013).

According to Dewi dan Putra (2017) leverage is “the use of a source of funds that has a fixed burden, with the hope that it will provide additional benefits that are greater than fixed expenses, so that shareholder profits increase. Leverage is used to explain the company's ability to use assets and sources of funds to increase returns to owners. However, if the debt is too large, the company will focus on the risks that occur due to the large amount of debt that will hinder management's initiative and flexibility to pursue profitable opportunities.

Growth Opportunities

Growth Opportunities explain the company's future growth prospects, this creates a positive prospect for company growth that can bring in company profits. Companies that continue to grow, easily attract capital, and this is a source of growth (Setiawati *et al.*, 2014).

According to Hasanzade *et al.* (2013) company growth opportunity is the company's ability to identify potential sources of funding for the company (both internal and external) to carry out investment activities and to provide appropriate financial planning for the company.

According to Fauzan dan Purwanto (2017) the growth prospect of a company is an opportunity for company growth in the future. If the company continues to grow, it will attract a greater positive response from investors because the expectation of profits to be obtained from the company is higher so that it will increase the earnings response coefficient. Companies that have a high growth rate are a good signal to stakeholders, and if they are interested, they will easily attract capital, especially capital from investors.

Profitability

Perusahaan yang baik adalah perusahaan yang memiliki efisiensi profesional yang baik, sehingga memiliki tingkat profitabilitas yang tinggi (Fauzan dan Purwanto, 2017). Profitability of a company reflects the effectiveness of the company which influences the response of investors to earnings information in making investment decisions. Profitability is one of the elements in assessing the company's performance and efficiency, so it is closely related to the profit generated (Santoso, 2015).

Mahendra dan Wirama (2017) reveal that high profitability will have a positive impact on the earnings response coefficient, because high profitability shows that the company has the ability to generate profits or profits which are believed to be the main information presented in the company's financial statements, so that it can attract investors. investors to invest. Because the main objective of investors to invest is to get a large return, on this basis investors will look for companies that provide large returns on investment.

Hypothesis Development

The Effect of Leverage on Earnings Response Coefficient

A company with a high level of leverage means that the heavier the financial burden faced by the company, the higher the risk faced by the company, the higher the level of uncertainty about the company's survival, so the smaller the company's earnings response coefficient (Subagyo dan Olivia, 2012).

The high leverage causes investors to be "afraid" to invest in the company due to the high enough risk that the market response to earnings announcements is relatively low. This relatively low market response will reflect that a company's profits are lacking or not of high quality (Dewi dan Putra, 2017).

Research conducted by Sari *et al.* (2018) proved that leverage has a negative effect on earnings response coefficient (ERC). This is also supported by the research of Mehdi *et al.* (2010) stated that every company that has high leverage makes the earnings response coefficient lower. Based on the theory and research that has been done, the first hypothesis proposed is:

H₁ : Leverage has a significant negative effect on the Earnings Response Coefficient

The Effect of Growth Opportunities on the Earnings Response Coefficient

Growth opportunities for the firm in the future is a positive prospect that can bring company profits. The prospects of becoming a good signal to investors and stakeholders others. If the company continues to grow, it will attract a greater positive response from investors because the expectation of profits from the company is higher, thus increasing the profit response coefficient of the company (Fauzan dan Purwanto 2017).

Shareholders will respond more to companies that have a high chance of growth, because companies with high growth opportunities will provide high future benefits for shareholders (Susanto, 2012).

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This theory is supported by research conducted by Susanto (2012) and Hasanazade *et al.* (2013) which proved that companies with greater growth opportunities will have a high earnings response coefficient. Based on the analysis and previous research, the second hypothesis proposed is:

H₂ : Growth opportunities have a significant positive effect on the Earnings Response Coefficient

The Effect of Profitability on the Earnings Response Coefficient

Profitability is related to the market reaction to company profits. Profitability ratios are necessary for investors because they can measure the company's performance to consider the extent to which the investment will be able to provide returns in accordance with the level indicated by investors.

According to Aryanti dan Sisdyani (2016) profitability is positively related to investor response, namely the greater the profitability, the greater the investor's response. If the profitability is related to the earnings response coefficient, it can be said that if the company's profitability is high, the profit generated by the company increases, which in turn will influence investors to invest.

According to research by Setiawati *et al.* (2014) the size of the profitability obtained by the company affects the earnings response coefficient (ERC), so that it can be used to increase the earnings response coefficient in the future compared to companies with low profitability. In line with Mahendra dan Wirama (2017) research with the conclusion that profitability has a significant effect on earnings response coefficient. Aryanti dan Sisdyani (2016) research shows that profitability has an effect on earnings response coefficient and the value of the regression coefficient shows a positive sign, which means that profitability has a positive effect on earnings response coefficient. Based on some of the explanations above, the hypothesis that the researcher will state is:

H₃ : Profitability has a significant positive effect on the Earnings Response Coefficient

The Effect of Leverage, Growth Opportunities and Profitability on the Earnings Response Coefficient

All operational activities and performance of a company can be stated by the company in a financial statement (financial statement) and an annual report (annual report). Financial reports that serve as an analytical tool for making investment decisions, are usually used by investors. Investors need an analysis to convince themselves to determine which companies to invest, in terms of debt, growth prospects and the level of profit generated by the company will be used as a reference.

Investors can see from these three aspects, in order to judge the company whether it is appropriate to be a profitable investment place. High leverage can have an impact on future growth prospects. Companies with high enough debt make the risk of the company high, with this the prospect of company growth will decrease and may go bankrupt. However, if debt / loan is used by the company properly, it will increase the company's growth opportunity and the resulting profit will be stable and may increase. This makes the company have a high chance of making a profit and has an impact on high profitability.

From the linkage of these aspects, it will have an impact on the quality of earnings information that will be obtained by investors in order to determine which companies to provide capital. Therefore, leverage , growth opportunities and profitability can influence the earnings response coefficient. Based on the explanation above, the researcher can state the hypothesis:

H₄ : Leverage, Growth Opportunities and Profitability have a significant effect on the Earnings Response Coefficient

From the development of the hypothesis that has been described, the following is an overview of the variables to be tested in Figure 1.

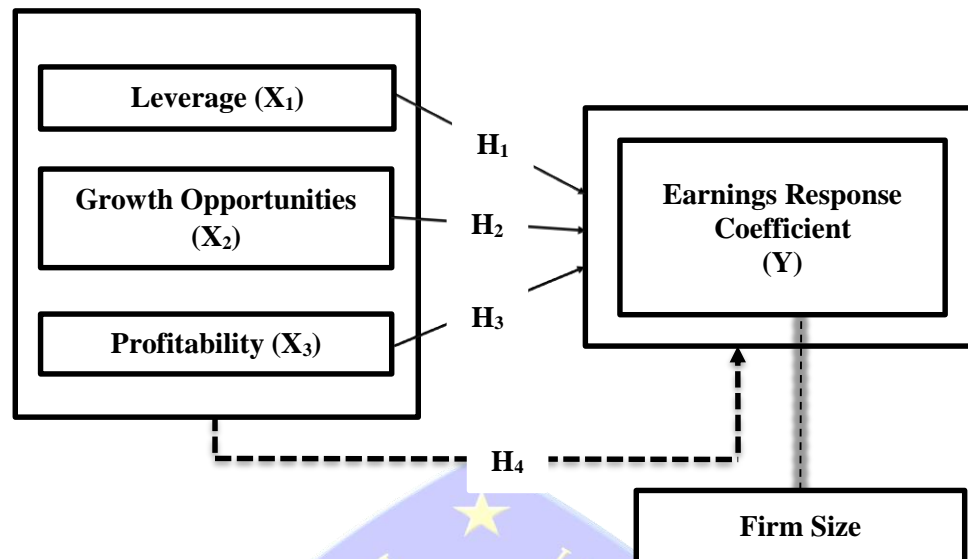


Figure 1. Research Conceptual Framework

III. RESEARCH METHOD

Research Strategy

In this study, the strategy used is associative or relationship research. Associative research is research that intends to describe and test the hypothesis of the relationship between two or more variables (Sugiyono, 2018:20). The relationship in this study is a causal relationship. A causal relationship is a causal relationship involving the independent variable and the dependent variable.

The method used in this research is quantitative method. According to Sugiyono (2018:23) quantitative method is a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim of describing and testing predetermined hypotheses. The data in this study were obtained from secondary data. The data used comes from consumer goods companies listed on the Indonesia Stock Exchange (IDX) during the 2015-2019 research year. This study uses time series data that reported an 2015-2019 financial year and data between companies or data cross section. This study uses panel data regression analysis method and is processed using the software Eviews (Econometric Views) version 10.

Population

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics that are determined by researchers to be studied and then drawn conclusions. The research population is all consumer goods companies listed on the Indonesia Stock Exchange (BEI) for the 2015-2019 study period.

Sample

Sample is part of the members of the population that is the actual source of data in a study which is taken using a certain technique called a sampling technique. The sampling technique used in the nonprobability sampling group was the purposive sampling method.

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The sample criteria considered in this study are as follows:

- Consumer goods companies listed on the Indonesia Stock Exchange during the 2015 - 2019 period.
- Companies that publish consecutive annual financial reports for the period 2015 - 2019.
- Consumer goods companies that made consecutive profits during the 2015 - 2019 period.
- Companies that publish annual financial statements using the rupiah currency.

Table 1: Sample Determination

| No. | Criteria | Amount |
|--|---|--------|
| 1 | Consumer Goods Companies listed on the Indonesia Stock Exchange in 2015-2019 | 42 |
| 2 | Companies that do not publish consecutive annual financial statements during the 2015-2019 period | (9) |
| 3 | Did not make a profit in a row during the 2015-2019 period | (7) |
| Total Listed Issuers | | 26 |
| Number of Sample (26 x 5 years) | | 130 |

Sumber: Reprocessed (2020)

Operational Variable

According to Sugiyono (2018:68) research variables are an attribute or nature or nature or value of objects, organizations, or activities that have certain variations that are determined by researchers to be studied and drawn conclusions. As for the variables in this study are:

Dependen Variable

The dependent variable or dependent variable is the variable that is affected or that is the result, because of the independent variable (Sugiyono, 2018). The dependent variable in this study is the Earnings Response Coefficient (ERC). According to Fauzan dan Purwanto (2017) earnings response coefficient is a coefficient that measures investor response to earnings announcements obtained from regressions between Cumulative Abnormal Return (CAR) and Unexpected Earnings (UE). The earnings response coefficient can be measured through several stages, referring to research conducted by Setiawati *et al.* (2014) include:

1. Calculating Cumulative Abnormal Return (CAR)

In this study, what needs to be calculated first is the abnormal return. The period used in the event window (event window) for 7 days, 3 days before (-3) date of publication of the financial statements, 1 day (0) at the time of publication of the financial statements and three days (+3) after the date of publication of the financial statements.

- Abnormal Return is obtained from

$$AR_{it} = R_{it} - R_{mt} \dots\dots\dots (1)$$

Information:

AR_{it} = Abnormal return of firm i in period t

R_{it} = Firm Return in period t

R_{mt} = Market Return in period t

The measurement of abnormal return in this study uses a market-adjusted model or a market-adjusted model, which assumes that the best predictor for estimating the return of a security is the market return at that time (Setiawati, Nursiam, dan Apriliana 2014). This model is used because the estimated security return is the same as the market return, so there is no need to specify an estimate period.

b) *Return* daily stock obtained as follows:

$$R_{it} = \frac{(P_{it} - P_{it-1})}{P_{it-1}} \dots\dots\dots (2)$$

Information :

R_{it} = Company i stock return on day t
 P_{it} = Closing price of share i on day t
 P_{it-1} = Closing price of share i on day t-1

c) Firm's daily market Return is obtained as follows:

$$R_{mt} = \frac{(IHSG_{it} - IHSG_{it-1})}{IHSG_{it-1}} \dots\dots\dots (3)$$

Keterangan :

R_{it} = Daily market Return
 P_{it} = Composite stock price index on day t
 P_{it-1} = Composite stock price index on day t-1

d) Calculating Cumulative Abnormal Return (CAR)

$$CAR_{it(-3,+3)} = \sum_{t=-3}^{t=+3} AR_{it} \dots\dots\dots (4)$$

Keterangan :

AR_{it} = Abnormal Return of firm i on day t
 $CAR_{it(-3,+3)}$ = Cumulative Abnormal Return of firm i at the event window on days t-3 to t+3, before and after the date of publication the financial statements.

2. Calculating *Unexpected Earnings* (UE)

Unexpected earnings is the difference between expected earnings and actual earnings (actual or reported earnings). Here's the surprise profit formula:

$$UE_{i,t} = \frac{AE_{i,t} - AE_{i,t-1}}{AE_{i,t-1}} \dots\dots\dots (5)$$

Keterangan :

$UE_{i,t}$ = *Unexpected earnings* for firm i in period t
 $AE_{i,t}$ = Accounting profit (*earnings*) after tax of firm i in year t
 $AE_{i,t-1}$ = Accounting profit (*earnings*) after tax of firm i in year t-1

3. Earning Response Coefficient

Earning Response Coefficient is obtained from regression between CAR and UE, the equation used to determine ERC is:

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$$CAR = \alpha + \beta (UE) + \varepsilon \dots\dots\dots (6)$$

Information:

CAR = Cumulative Abnormal Return
 α = Constant
 (UE) = Unexpected Earning
 β = Regression result coefficient (KRL)
 e = Component error

if the coefficient results are (β) not equal or more than zero (> 0), it means that earnings contain quality information so that it is useful for investors in making decisions, on the other hand, if the coefficient results are (β) negative or less than zero (< 0) it means that profits do not contain quality information so that it is less informative for investors for decision making.

Independent Variable

Independent Variable used in this study include :

a. Leverage

Leverage is the debt ratio indicating the proportion of the company's assets that are financed with debt. This ratio measures the company's ability to pay both current and long-term debt (total liabilities) (Harrison Jr et al., 2012). Leverage is measured using a debt to equity ratio (DER). The calculation formula derived from research by Alifiana dan Praptiningsih (2016) is as follows:

$$DER = \frac{\text{Total Liability}}{\text{Total Equity}} \dots\dots\dots (7)$$

According to Alifiana dan Praptiningsih (2016) the higher DER of the company, the smaller the amount of owner's capital that can be used as collateral for debt. The general rule is that a company should have a DER of less than 5% ($DER < 0,05$). If it exceeds the general provisions, it can have an impact on the weak earnings response coefficient.

b. Growth Opportunities

Growth Opportunities of company is the company's ability to identify potential sources of funding for the company (both internal and external) in order to carry out investment activities and to provide proper financial planning for the company (Hasanzade, Darabi, dan Mahfoozi 2013). Companies that have increased growth prospects will generate a positive opinion from investors and potential investors that the expectation of profits that can be obtained by the company will be higher.

According to Godfrey *et al.* (2010) growth opportunities is calculated using market-to-book value of equity ratio (MBE). The calculation formula refers to the research conducted by Imroatussolihah (2013) namely :

$$MBE = \frac{\text{Total saham beredar} \times \text{Harga saham}}{\text{Total Ekuitas}} \dots\dots\dots (8)$$

Companies with increased growth will also provide high benefits in the future. The stipulation is that the company should have a market to book equity ratio that is not equal to zero or more than zero (> 0). Likewise, shareholders will give a small response to companies that have a low or negative market to book value of equity ratio (> 0).

c. Profitability

Profitability of a company reflects the effectiveness of the company which affects the response of investors to the information contained in profits when making decisions to invest. Profitability is one of the elements in assessing the company's performance and efficiency, so it is closely related to the profit generated (Santoso, 2015).

In this study, researchers measured company profitability using the Return On Asset (ROA) ratio which describes the extent to which the company's assets can generate profits (Setiawati et al. 2014). The formula for calculating ROA is based on research conducted by Setiawati *et al.* (2014) are as follows :

$$ROA = \frac{Net\ Income}{Total\ Assets} \dots\dots\dots (9)$$

The greater the Return On Asset (ROA) of a company, the greater the level of profit that the company can achieve and the better the company's position in terms of the use of its assets.

Control Variable (Firm Size)

In this study, researchers used control variables to control the relationship between the dependent variable and the independent variable. The control variable used is firm size. Firm size is large or small scale company that can reflect the risks to be faced and influence the market in decision making which can be measured in various ways, such as total assets, net sales and company market capitalization (Alifiana and Praptiningsih, 2016).

In this study, it is determined based on the company's total assets. Company size is measured using the natural log of total company assets, both current assets and company fixed assets, with calculations referring to Mahendra dan Wirama (2017) as follows:

$$UP = Log\ Natural\ (Total\ Assets) \dots\dots\dots (10)$$

Technique a Data Analyst

In looking for a relationship or linkages between variables in this study, researchers used quantitative data with the method used was panel data regression. Panel data is a combination of cross section data and time series data, where the same cross section data unit is measured at different times. In other words, panel data is data from several individuals (entities) that are the same and observed over a certain period of time. Researchers use panel data regression test to find a proof of the relationship of the independent variable to the dependent variable. This study uses Excel 2016 and statistical software Econometric views (Eviews) version 10.

According to Widarjono (2013:253) the use of panel data in an observation has several advantages. First, panel data is a combination of two time series data and a cross section is able to provide more data so that it will produce a greater degree of random . Second, combining information from time series and cross section data can solve problems that arise when there are omitted-variable problems . Panel data regression models in this study are:

$$ERC = C + \beta_1 DER + \beta_2 MBE + \beta_3 ROA + \beta_4 SIZE + eit \dots\dots\dots (11)$$

Keterangan :

ERC = Earnings Response Coefficient

C = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression Coefficient

DER = Leverage

MBE = Growth Opportunities

ROA = Profitability

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SIZE = Firm Size
eit = Error
t = Time
i = Firm

IV. RESULTS

Descriptive Statistics

Descriptive statistical analysis is used as a description or for a brief explanation of the data from the variables studied. Descriptive statistics can provide information about the characteristics of the research variables such as the number of observations, the mean value, the maximum value, the minimum value, and the standard deviation. Based on the descriptive statistical test conducted using Eviews 10, the results are as shown in the following table.

Table 2: Descriptive Statistics Test Results

| | KRL | LEV | KSB | PROFIT | UP |
|--------------|-----------|----------|----------|----------|----------|
| Mean | 0.064979 | 0.712551 | 6.319530 | 0.131887 | 28.98753 |
| Maximum | 1.762612 | 2.909487 | 82.44443 | 0.920997 | 32.20096 |
| Minimum | -1.337414 | 0.076125 | 0.256446 | 0.000866 | 25.79571 |
| Std. Dev. | 0.533204 | 0.566884 | 12.64262 | 0.125406 | 1.575828 |
| Observations | 130 | 130 | 130 | 130 | 130 |

Source: Results of data processing with Eviews 10

Based on the results in the table above, it can be seen that the sample used was 130 samples. For the earnings response coefficient, the maximum value of 1.762612 is obtained by PT. Kalbe Farma Tbk (KLBF) in 2015 with a value of more than 0 (> 0), this shows that the content of quality earnings information can be used as decision making by investors. For the minimum (lowest) value of the earnings response coefficient of -1.337414 obtained by PT Nippon Indosari Corpindo Tbk (ROTI), with a value of less than 0 which indicates that the profit information content is less qualified and limited to be used as a decision making. Earnings response coefficient has an average value of 0.068334 with a standard deviation of 0.533204. The average value of the earnings response coefficient is equal to 0, this indicates that the consumer goods sector companies contain less quality earnings information for investors to use as an instrument for investor decision making.

In the above table leverage has a maximum value of 2.909487 obtained from PT. Unilever Indonesia Tbk (UNVR) in 2019. The maximum value of more than 0.5 and the level of debt that is higher than equity indicates that companies use more loans from borrowers than their own capital which of course will create a high level of risk for the company. For leverage which has a minimum value of 0.076125 which is obtained from PT. Sido Muncul Tbk (SIDO) Herbal Medicine and Pharmaceutical Industry in 2015. The minimum value is less than 0.5, which means that SIDO in its operational activities uses more of its own capital rather than borrowed funds which makes the company's risk level low. The average value of leverage obtained a value of 0.712551 with a standard deviation of 0.566884. The average value of leverage in consumer goods sector companies is more than 0.5 in the sense that every 1 equity can guarantee the company's debt of 0.71, the high use of loans rather than owner's capital is to support operational activities and the proportion of company assets.

For the results of the opportunity to grow, the maximum value obtained is 82.44443 owned by PT. Unilever Indonesia Tbk (UNVR). The maximum value of the opportunity to grow is very high, indicating that UNVR has good growth prospects in increasing its future profits. Meanwhile, the minimum value for the opportunity to grow is 0.256446 at PT. Budi Starch & Sweetener Tbk

(BUDI) in 2015. A low minimum value indicates that the company has a low opportunity to increase its future profits. The average value of growth opportunities in the consumer goods sector companies amounted to 6.319530 and the standard deviation is 12.64262. With an average value that exceeds zero (0), it shows that the opportunities for companies in the consumer goods sector to increase future profits are quite good and the growth prospects are quite convincing.

Profitability results have a maximum value of 0.920997 which is obtained by PT. Merck Tbk (MERK) in 2018. This shows that the company's performance is very good in managing each of its assets to generate high net income compared to companies in the same sector and will attract investors to invest. The minimum value of profitability is obtained at PT. Kimia Farma Tbk (KAEF) in 2019 amounted to 0.000866. These results lead to an unfavorable perception among investors who will invest, that the company's management is not able to boost the company's performance in terms of using assets to generate net income. The average value of profitability is 0.131887 with standard deviation 0.125406. This value shows that the average consumer goods company performs quite well, using 1.00 assets can generate 0.13 net profit.

For firm size results, the maximum value obtained is 32.20096 which comes from PT. Indofood Sukses Makmur Tbk. (INDF) in 2018 with total asset ownership of Rp96.537.796.000.000, because the total assets are more than 250 billion, INDF is one of the largest companies in this sector. The minimum value obtained is 25.79571 owned by PT. Pyridam Farma Tbk. (PYFA) with total assets of Rp159.563.931.041, which makes PYFA a medium-sized company with total assets of less than (<) 250 billion. In this sector, it has a mean and standard deviation of 28.98753 and 1.575828. With an average asset of Rp12.922.730.821.684, it shows that the average consumer goods sector company is classified as a large company because (>) 250 billion.

Panel Data Model Selection Test

In the three models, namely Common Effect Model (CEM), Fixed Effect Model (FEM), dan Random Effect Model (REM) for which each result has been sought, a test is needed to determine the appropriate model to estimate the regression equation using the Chow test, the Hausman test and the lagrange multiplier test.

Chow Test

Chow test is used to test Common Effect Model dan Fixed Effect Model in order to select the best panel data regression model. In the Chow test, the hypothesis is used to be tested further. Determination of the model used if the result of cross-section probability F is more than 0.05 then H_0 : is accepted so that the common effect model fits into the regression equation. However, if the cross-section probability F is less than 0.05 then H_a : is accepted so that the fixed effect model fits into the regression equation. Here are the results of the chow test:

Table 3: Chow Test Results

| Redundant Fixed Effects Tests | | | |
|----------------------------------|-----------|----------|--------|
| Equation: Untitled | | | |
| Test cross-section fixed effects | | | |
| Effects Test | Statistic | d.f. | Prob. |
| Cross-section F | 1.143738 | (25,100) | 0.3115 |
| Cross-section Chi-square | 32.693135 | 25 | 0.1389 |

Source : Results of data processing Eviews 10

The table shows the *cross-section* F probability value of 0.3115 which means that H_0 = accepted dan H_1 = rejected, so it can be concluded that the *common effect model* will be used.

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Hausman Test

Hausman Test is used to compare between the *Fixed Effect Model* and *Random Effect Model* and is chosen as the best model in the panel data regression equation. Determining the best model is if the result of the probability of cross-section F is more than 0.05 then H_0 : accepted , so that the selected regression model is the random effect model . However, if the cross-section probability F is less than 0.05 then H_a : is accepted, so the fixed effect model fits into the regression equation. Here are the results of the hausman test:

Table 4: Hausman Test Results

| Correlated Random Effects – Hausman Test | | | |
|--|------------------|--------------|--------|
| Equation: Untitled | | | |
| Test cross-section random effects | | | |
| Test Summary | Chi-Sq.Statistic | Chi-Sq. d.f. | Prob. |
| Cross-section random | 8.716087 | 4 | 0.0686 |

Source: Results of data processing with Eviews 10

The results of the Hausman test obtained a random cross-section probability of 0.0686. This shows a probability of more than 0.05 (> 0.05), which states that H_0 : accepted and H_a : rejected. In conclusion, the best model to use is the random effect model.

Lagrange Multiplier Test

Langrange multiplier (LM) test which uses the Breusch-Pagan Test to compare the best model between the common effect model and the random effect model . The interpretation of the LM Test hypothesis is that if the probability of breusch-pagan both is more than 0.05, then the common effect model is selected as the panel data regression model. Meanwhile, if the breusch-pagan both probability is less than 0.05, the random effect model is selected as the panel data regression model. The following are the results of the hausman test:

Tabel 5: Lagrange Multiplier Test Results

| Lagrange Multiplier Tests for Random Effects | | | |
|---|----------------------|----------------------|----------------------|
| Null hypotheses: No effects | | | |
| Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives | | | |
| | Test Hypothesis | | |
| | Cross-section | Time | Both |
| Breusch-Pagan | 0.577822 (0.4472) | 1.405656 (0.2358) | 1.983478 (0.1590) |

Source : Results of data processing with Eviews 10

The results of the three tests indicate that:

1. Chow test with prob. cross section $F > 0.05$ ($0.3115 > 0.05$), this indicates that H_0 = accepted and the **Common Effect Model** is selected.
2. Hausman test with prob. random cross-section > 0.05 ($0.0686 > 0.05$), this indicates that H_0 = accepted and the **Random Effect Model** is selected.
3. Lagrange Multiplier test with probability both > 0.05 ($0.1590 > 0.05$) , this shows that H_0 = accepted and the **Common Effect Model** is selected.

For the chow test and the lagrange multiplier test, the selected model is the Common Effect Model . It can be concluded that the panel data regression model selection that can be used to determine the effect of Leverage, Growth Opportunities and Profitability on the Earnings Response Coefficient is the **Common Effect Model**.

Classic Assumption Test

To proceed to the hypothesis testing stage, classical assumption tests are first carried out so that the model data used in the research are appropriate and meet the BLUE (Beast Linear Unbiased Estimator) requirements. For this reason, data normality testing, multicollinearity test, heteroscedasticity test and autocorrelation test were carried out.

Normality Test

Normality test aims to test whether in the regression model the confounding or residual variables have a normal distribution. The residual normality test in this study used the Jarque-Bera (JB) test . Following are the results of the normality test:

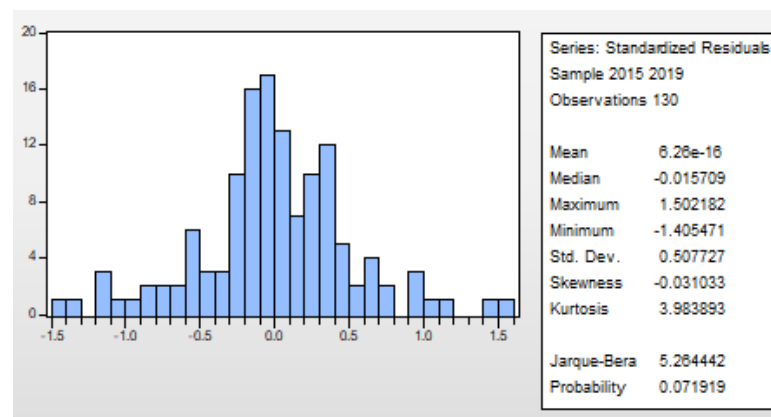


Figure 2: Normality Test Results

Based on Figure 2, the *Jarque-Bera* probability value is 0.071918, the value obtained is greater than 0.05 ($0.071918 > 0.05$) so that H_0 is accepted and H_a is rejected, it can be concluded that the residuals **are normally distributed**.

Multicollinearity Test

Uji multicollinearity test aims to test whether the regression model found a high or perfect correlation between the independent variables. According to Ghozali and Ratmono (2017) the cutoff value commonly used to indicate multicollinearity is Tolerance < 0.10 with a collinearity level of 0.90 or equal to $VIF > 10$. To find out whether the independent variables have a high correlation or not, it is necessary to analyze using a correlation matrix in Eviews 10 software. The following is the output of the correlation matrix:

Table 6: Multicollinearity Test Results

| | LEV | KSB | PROFIT | UP |
|--------|----------|----------|----------|----------|
| LEV | 1.000000 | 0.643805 | 0.260749 | 0.140961 |
| KSB | 0.643805 | 1.000000 | 0.612205 | 0.245635 |
| PROFIT | 0.260749 | 0.612205 | 1.000000 | 0.165142 |
| UP | 0.140961 | 0.245635 | 0.165142 | 1.000000 |

Source: Results of data processing with Eviews 10

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Based on the results of the correlation matrix output above, it shows that there is no correlation between independent variables with a collinearity value less than ($<$) 0.90. It can be concluded that **there is no multicollinearity problem** in this study.

Heteroscedasticity Test

This test aims to detect the spread of variants inequality (variance) of the value of the residual or error. According to (Ghozali dan Ratmono 2018:85) the prerequisites that must be met in the regression model are that homoscedasticity means the same (homo) and the distribution (scedasticity) has the same variance (equal variance).

Table 7: Heteroscedasticity Test Results

| | | | |
|------------------------------------|----------|---------------------|--------|
| Heteroskedasticity Test: Glejser | | | |
| Null hypothesis : Homoskedasticity | | | |
| F-Statistic | 0.557021 | Prob. F(4,125) | 0.6943 |
| Obs*R-squared | 2.276625 | Prob. Chi-Square(4) | 0.6850 |
| Scaled explained SS | 2.821833 | Prob. Chi-Square(4) | 0.5881 |

Source : Results of data processing Eviews 10

The output results obtained in table 7 show that the chi-square prob. on Obs*R-squared is more than 0.05 ($0.6850 > 0.05$). So it can be concluded that **there is no problem heteroscedasticity** or residuals have the same distribution (homoscedasticity).

Autocorrelation Test

Autocorrelation Test aims to test whether in a linear regression model there is a correlation between confounding errors (residuals) in period t with errors in period $t-1$ (previous). In testing the presence of autocorrelation in research, the DW (Durbin-Watson) test is used to detect the occurrence of autocorrelation. The following are the output results obtained from the selected regression model:

Table 8: Autocorrelation Test Results

| | |
|--------------------|----------|
| Durbin-Watson stat | 1.910901 |
|--------------------|----------|

Source : Results of data processing Eviews 10

The results of the Eviews output above show that the Durbin-Watson (DW) value is 1.910901. The DW value will be compared with the $d_L = 1.6508$ and the $d_U = 1.7774$ serta $4 - d_U = 4 - 1.7774 = 2.2226$. The d_U and d_L values derived from $n = 130$ and independent variable (k) were 4. The Durbin-Watson Statistic value is obtained which lies between d_U and $4 - d_U$ ($1.7774 < 1.910901 < 2.2226$). The conclusion model is **free from autocorrelation problems**.

Panel Data Regression Analysis

Panel data is a dataset in which the behavior of the cross-section unit is observed over time (Ghozali dan Ratmono, 2017). Panel data regression analysis aims to examine the effect of the independent variables on the dependent variable involving inter-unit and inter-time data sources. The independent variables used in this study are Leverage, Growth Opportunity and Profitability and the firm size control variable on the dependent variable Earnings Response Coefficient. The panel data regression estimation chosen as the best model is the **Common Effect Model (CEM)** for the panel data regression equation. The following is the result of the Common Effect Model panel data regression:

Table 9: Panel Data Regression Analysis Results

| Variable | Coefficient |
|----------|-------------|
| C | -1.751559 |
| LEV | -0.227497 |
| KSB | -0.001921 |
| PROFIT | 0.227103 |
| UP | 0.067644 |

Source : Results of data processing Eviews 10

Based on the results of panel data processing in table 9 , the panel data regression equation can be formulated as follows:

$$\text{KRL} = -1.751559 - 0.227497 \text{ LEV} - 0.001921 \text{ KSB} + 0.227103 \text{ PROFIT} + 0.067644 \text{ UP} + \varepsilon$$

Based on the panel data regression equation above, it can be interpreted as follows:

1. The results of the regression above shows a constant of -1.751559, which means that if the independent variable is Leverage , Growth Opportunity and Profitability and the Company Size control variable is 0, then the Earnings Response Coefficient is -1.751559.
2. The value of the Leverage regression coefficient is -0.227497, this shows that there is a negative influence between Leverage (X1) on the Earnings Response Coefficient. Thus, if the Leverage increases by 1 unit, the Earnings Response Coefficient on average decreases by 0.227497 assuming the other independent variables and control variables are constant.
3. The regression coefficient value of Growth Opportunities is -0.001921, The regression coefficient value of Growth Opportunity is 0.001921 with the assumption that the other independent variables and the control variable are constant.
4. The value of the Profitability regression coefficient is 0.227103, this shows that there is a positive influence between Profitability (X3) on the Profit Response Coefficient. This means that if the profitability increases by 1 unit, then the Profit Response Coefficient on average increases by 0.227103 with the assumption that the other independent variables and control variables are constant.
5. The regression coefficient value of Company Size as a control variable is 0.067644, which indicates that there is a positive influence between Company Size (X4) on the Earnings Response Coefficient. This means that if the Company Size increases by 1 unit, the Earnings Response Coefficient on average increases by 0.067644, assuming the independent variable is constant.

Determination Coefficient Test

The determination of coefficient essentially measures how far the model's ability to explain variations in the dependent variable (Ghozali and Ratmono 2017:55). Following are the results of testing the coefficient of determination using the Adjusted R- squared :

Table 10: Test Results Coefficient of Determination

| | |
|--------------------|----------|
| Adjusted R-squared | 0.064263 |
|--------------------|----------|

Source : Results of data processing Eviews 10

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According to the table know the value of Adjusted R^2 obtained by 0.064263. This shows that 6.4263% Earnings Response Coefficient is influenced by Leverage, Growth Opportunities, Profitability and Firm Size. Meanwhile 93.5737% (100% - 6.4263%) were influenced by other factors not included in this study.

Partial Test (t test)

The t test or partial test basically shows how far the influence of one independent variable is on the dependent variable by assuming the other independent variables are constant (Ghozali dan Ratmono, 2017:57). The t test uses a significance level of $\alpha = 5\%$ and compares the t_{count} value with the nilai t_{table} value. The results of the t statistical test are obtained from the table as follows:

Table 11: Partial Test Results

| <i>t-Statistic</i> | <i>Prob.</i> |
|--------------------|--------------|
| -2.032116 | 0.0443 |
| -2.119150 | 0.0361 |
| -0.322734 | 0.7474 |
| 0.483626 | 0.6295 |
| 2.274496 | 0.0246 |

Source : Results of data processing Eviews 10

In this study, the number of observations made was 130 ($n = 130$), the independent variables in this study were 4 ($k = 4$), with a significance of 0.05, so it can be determined that $t_{\text{table}} df = n - k - 1$ ($130 - 4 - 1 = 127$), so that the t_{table} value can be found using Microsoft Excel with the Insert Function formula as follows :

$$\begin{aligned} T_{\text{table}} &= \text{TINV}(\text{probability}, \text{degree_freedom}) \\ T_{\text{table}} &= \text{TINV}(0.05, 127) \\ T_{\text{table}} &= 1.97882 \end{aligned}$$

Based on the calculation of the regression model and t_{table} above, here's the explanation:

1. First Hypothesis (H1)

Leverage has a t_{count} sebesar -2.119150. This result is smaller than the t_{table} value, so the value is $-2.119150 < -1.97882$. The probability value is 0.0361 and is below the significance value of 0.05 ($0.0361 < 0.05$). From these results it can be concluded that Leverage has a significant negative effect on the Earnings Response Coefficient. The first hypothesis which states that leverage has a significant negative effect on the Earnings Response Coefficient is **acceptable**.

2. Second Hypothesis (H2)

The Growth Opportunities has t_{count} is -0.322734. This results is smaller than t_{table} value, the value is $-0.322734 > -1.97882$. The probability value is 0.7474 and is above the significance value of 0.05 ($0.7474 > 0.05$). From these results it can be concluded that the Growth Opportunity has no significant negative effect on the Earnings Response Coefficient. The second hypothesis which states that Growth Opportunity has a significant positive effect on the Earnings Response Coefficient is **rejected**.

3. Third Hypothesis (H3)

Profitability has t_{count} of 0.483626. This result is smaller than the t_{table} value, so the value is $0.483626 < 1.97882$. For the probability value is 0.6295 and is above the significance value ($0.6295 > 0.05$). From these results it can be concluded that Profitability **has a positive and insignificant effect**

on Earnings Response Coefficient. Untuk Third Hypothesis which states that Profitability has a significant positive effect on Earnings Response Coefficient **rejected**.

Simultaneous Test (F Statistic Test)

The F statistical test basically shows whether all the independent variables included in the model have a joint or simultaneous influence on the dependent variable. The results of the F Statistical Test are obtained as follows :

Table 12: Simultaneous Test Results

| | |
|-------------------|----------|
| F-statistic | 3.214800 |
| Prob(F-statistic) | 0.015016 |

Source : Results of data processing Eviews 10

Based on the results from table 12, obtained F_{count} of 3.214800 where to obtain F_{tabel} dengan $df1$ obtained for (number of variables – 1) and $df2$ ($df2 = n - k - 1$). With the number of samples ($n = 130$), the number of variables ($k = 5$) so that can be known ($df1 = 5 - 1 = 4$) and ($df2 = 130 - 4 = 126$) which can be obtained from Ms. Excel with the formula (FINV) and $\alpha = 5\%$ (0.05). Here is the calculation:

$$F_{tabel} = \text{FINV}(\text{probability}, \text{deg_freedom1}, \text{deg_freedom2})$$

$$F_{tabel} = \text{FINV}(0.05, 4, 126)$$

$$F_{tabel} = 2.443591$$

The results of these calculations show $F_{table} < F_{count}$ or ($2.443591 < 3.214800$) with a probability (F-statistic) in the panel data regression model of $0.015016 < 0.05$. With these results it can be concluded that $H_4 = \text{accepted}$, which means that Leverage, Growth Opportunities and Profitability simultaneously **have a significant effect** on the Earnings Response Coefficient.

Interpretation of Research Results

The Effect of Leverage on the Earnings Response Coefficient

The first hypothesis of this study is to find evidence whether the leverage which is proxied by the debt to equity ratio (DER) has an influence on the earnings response coefficient. The results of the analysis show that the t_{count} variable regression coefficient is smaller than the t_{table} ($-2.119150 < -1.97882$). While the probability result of 0.0361 indicates that it is less than 0.05 ($0.0361 < 0.05$). This means that Leverage has a significant negative effect on the Profit Response Coefficient in the Consumer Goods Sector Companies in 2015-2019.

The results of this study are in line with Sari *et al.* (2018) and Mehdi *et al.* (2010). Companies with high leverage show more loans and to creditors than the use of their own capital to finance every operational activity as well as buy every company asset. Investors assume that any profits generated by the company will be enjoyed by creditors rather than shareholders. Good news will be distributed in the form of loan and interest payments rather than dividends. This makes the information contained during earnings announcements more quickly responded to by creditors and shareholders will respond in reverse. This study is not in line with the research Alifiana dan Praptiningsih (2016) and Delvira dan Nelvirita (2013) which states Leverage is not air a significant effect on earnings response coefficient.

The Effect of Growth Opportunity on the Earnings Response Coefficient

The second hypothesis is to determine the effect of growth opportunities, which is proxied by the market to book equity ratio (MBE) on the earnings response coefficient. The results of the analysis show that the regression coefficient t_{count} is greater than the t_{table} ($-0.322734 > -1.97882$) with

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a significance value greater than 0.05 ($0.7474 < 0.05$). This shows that growth opportunities have a negative and insignificant effect on the earnings response coefficient.

This research is not in line with (Susanto 2012) and (Hasanzade et al. 2013) which state that investors' motivation in investing is to get long-term benefits. This study is not in accordance with the hypothesis because the motivation of investors in investing in consumer goods sector companies does not see the long-term prospects of the company, but investors are motivated to get short-term profits or capital gains. According to (Sandi 2013) and the growth opportunities factor is usually observed by investors who have a long-term perspective to get a yield from their investment.

The Effect of Profitability on the Earnings Response Coefficient

The third hypothesis is conducted to determine whether the proxied profitability of return on assets (ROA) has an effect on the earnings response coefficient. The results of the analysis in this study state that the regression coefficient t_{count} is smaller than the t_{tabel} ($0.483626 < 1.97882$) with a significance value greater than 0.05 ($0.6295 < 0.05$). It can be concluded that profitability has a positive and insignificant effect on the earnings response coefficient.

This research is in line with Fauzan and Purwanto (2017) and Sari *et al.* (2018) which states that profitability is not a benchmark in investing but signal theory should be applied to this hypothesis, but in fact the company has failed to attract a market response because the profitability proxied by ROA only explains the rate of return on assets to market players, investors will look for factors -Other factors contained in earnings announcements which are much more attractive and have informativeness for them to make their investment decisions.

This research is not in line with research conducted by Mahendra & Wirama (2017) and Aryanti & Sisdyani (2016) which state that profitability has a positive effect on the earnings response coefficient assuming investors will see the level of profit from the company and the market will respond if the company's profitability is high. Profitability should be able to describe the extent to which the company's assets generate profits. The higher the profitability, the more quality the earnings information will be.

The Effect of Leverage , Growth Opportunity and Profitability on Earnings Response Coefficient

The fourth hypothesis is carried out with the aim of knowing the simultaneous effect of leverage , growth opportunities and profitability on the earnings response coefficient. The results of the analysis state that the regression coefficient with $F_{table} < F_{count}$ ($2.443591 < 3.214800$) with a significance value of less than ($<$) 0.05 or $0.015016 < 0.05$. It can be concluded that simultaneously leverage , growth opportunities and profitability **have a significant effect** on the earnings response coefficient.

CONCLUSION, IMPLICATIONS AND LIMITATIONS OF THE RESEARCH

Conclusion

Based on the results of data analysis and the discussion that has been described, it can be concluded as follows:

1. Leverage has a significant negative effect on the Earnings Response Coefficient. The results of this study indicate that Leverage has a negative effect on the quality of earnings information in the financial statements of companies in the consumer goods sector for 2015-2019. This shows that a high level of debt will be responded to poorly by investors because it will reflect less qualified earnings , as well as good news when the earnings announcement will be responded positively by creditors but responded negatively by investors or shareholders.
2. Growth opportunities has a positive and insignificant effect on the Earnings Response Coefficient. These results illustrate that investors investing in companies in the consumer goods sector in

2015-2019 do not aim to invest in the long term but for short-term investments or seek capital gains.

3. Profitability has a positive and insignificant effect on the Earnings Response Coefficient. These results explain that investors assume profitability only describes the rate of return on assets to market participants which makes investors look for other factors that support and have the informativeness to make their investment decisions.
4. Simultaneously, leverage, growth opportunities, and profitability have a significant effect on the earnings response coefficient. To determine how the quality of earnings can be used as a decision-making component, these variables are needed simultaneously to make it easier for investors to make the right and effective decisions to invest in a company.

Implication

Based on the research results obtained, the suggestions that will be given related to the results of the research are as follows:

1. For investors, before investing their own capital, first analyze the level of debt or loan of a company, because if a company with a high level of leverage or debt will make the profits obtained, it will be used more for loan payments to debtors than dividend distribution to shareholders or investors.
2. For companies to provide information in the financial statements as best as possible so as not to cause information asymmetry. This will make it easier for market players to assess the prospects for the company to grow or not in the future, thereby attracting investors to invest their funds.
3. For companies to provide other information to investors relating to the return of shares or profits that will be received by shareholders, because investors will pay more attention to the amount of returns that will be obtained from their investment.
4. This research should be useful for investors in determining the quality of a company's earnings information from various supporting components that can be used as an assessment of the quality of an earnings. The level of debt, growth prospects and rate of return of profits from the company can be used as a reference as an assessment of the quality of earnings information.

Limitations Of The Research

This research has limitations and shortcomings, namely :

1. In this study only using a sample of consumer goods companies listed on the Indonesia Stock Exchange and within 5 years.
2. The number of variables used is limited to three independent variables, namely leverage proxied by the debt equity ratio, growth opportunity proxied by the market to book equity ratio and profitability proxied by return on assets and control variables using company size.
3. Due to the ongoing COVID-19 pandemic, researchers have limitations in terms of finding literature sources for this research.

REFERENCES

- Alifiana, Meita, and Praptiningsih. 2016. "Pengaruh Leverage, Kesempatan Bertumbuh Dan Ukuran Perusahaan Terhadap Koefisien Respon Laba." *Jurnal Ekonomi, Manajemen Dan Akuntansi* 19(2):129–46.
- Anon. 2018. "Pengantar Pasar Modal." *Bursa Efek Indonesia*. Retrieved (<https://idx.co.id/investor/pengantar-pasar-modal/>).
- Aryanti, Gusti Ayu Putu Sintya, and Eka Ardhani Sisdyani. 2016. "Profitabilitas Pada Earnings Response Coefficient Dengan Pengungkapan Corporate Social Responsibility Sebagai Variabel Pemoderasi." *E-Jurnal Akuntansi Universitas Udayana* 15(1):171–99.
- Ball, Ray, and Philip Brown. 1968. "Empirical Evaluation of Accounting Income Numbers." *Journal of Accounting Research* Vol 6(2):159–78.

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(Study of Consumer Goods Companies Listed on Indonesia Stock Exchange 2015-2019)

- Basuki, Agus Tri. 2014. *Regresi Model PAM, ECM Dan Data Panel Dengan Eviews 7*. Pertama. Yogyakarta.
- Delvira, Maisil, and Nelvirita. 2013. "Pengaruh Leverage Dan Persistensi Laba Terhadap Earnings Response Coefficient(ERC)." *Jurnal WRA* 1(1):129–54.
- Dewi, Anak Agung Putri Kusuma, and I. Made Pande Dwiana Putra. 2017. "Pengaruh Leverage Dan Ukuran Perusahaan Pada Earnings Response Coefficient." *E-Jurnal Akuntansi Universitas Udayana* 19(1):367–91.
- Fahmi, Irham. 2015. *Manajemen Investasi: Teori Dan Soal Jawab*. 2nd ed. Jakarta: Salemba Empat.
- Fakhrudin. 2010. *Istilah Pasar Modal A - Z*. Jakarta: Elex Media Komputindo.
- Fauzan, Muhamad, and Agus Purwanto. 2017. "PENGARUH PENGUNGKAPAN CSR, TIMELINESS, PROFITABILITAS, PERTUMBUHAN PERUSAHAAN DAN RESIKO SISTEMATIK TERHADAP EARNING RESPONSE COEFFICIENT (ERC)(Studi Empiris Pada Perusahaan Manufaktur, Properti Dan Pertambangan Yang Terlisting Di Bursa Efek Indonesia (BE)." *Diponegoro Journal of Accounting* 6(1):256–70.
- Ghozali, Imam. 2013. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21 Update PLS Regresi*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, Imam. 2016. *Aplikasi Analisis Multivariat Dengan Program IBM SPSS 23*. Semarang: Universitas Diponegoro.
- Ghozali, Imam, and Dwi Ratmono. 2013. *Analisis Multivariat Dan Ekonometrika: Teori, Konsep Dan Aplikasi Eviews 8*. Semarang: Universitas Diponegoro.
- Ghozali, Imam, and Dwi Ratmono. 2017. *Analisis Multivariat Dan Ekonometrika : Teori, Konsep, Dan Aplikasi Dengan Eviews 10*. 2nd ed. Semarang: Fakultas Ekonometrika dan Bisnis Universitas Diponegoro.
- Godfrey, Jayne, Allan Hodgson, Ann Tarca, Jane Hamilton, and Scott Holmes. 2010. *Accounting Theory*. 7th ed. Australia: John Wiley & Sons australia, Ltd.
- Harahap, Sofyan Syafri. 2015. *Analisis Kritis Atas Laporan Keuangan*. Jakarta: PT. Grafindo Persada.
- Harrison Jr, Walter T., Charles T. Horngren, C. William Thomas, and Themin Suwardy. 2012. *Akuntansi Keuangan Jilid 1, Edisi IFRS*. 8th ed. Erlangga.
- Hasanzade, Mahboobe, Roya Darabi, and Gholamreza Mahfoozi. 2013. "Factors Affecting the Earnings Response Coefficient : An Empirical Study for Iran." *European Online Journal of Natural and Social Scienses* 2(3):2551–60.
- Herdinandasari, Sherla Sherlia, and Nur Fadrih Asyik. 2016. "Pengaruh Ukuran Perusahaan, Profitabilitas, Dan Voluntary Disclosure Terhadap Earning Response Coefficient (ERC)." *Jurnal Ilmu Dan Riset Akuntansi* 5(November):1–19.
- Hery. 2015. *Pengantar Akuntansi: Comprehensive Edition*. Jakarta: Grasindo.
- Imroatussolihah, Ely. 2013. "Pengaruh Risiko, Leverage, Peluang Pertumbuhan, Persistensi Laba Dan Kualitas Tanggung Jawab Sosial Perusahaan Terhadap Earnings Response Coefficient Pada Perusahaan High Profile." *Jurnal Manajemen* 1(1):75–87.
- Indra, A. Zubaida, Agus Zahron, and Ana Rosianawati. 2011. "Analisis Faktor-Faktor Yang Mempengaruhi Earnings Response Coefficient (ERC): Studi Pada Perusahaan Properti Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia." *Jurnal Akuntansi Dan Keuangan* 16(1):1–22.
- Kasmir. 2013. *Analisis Laporan Keuangan*. 1st ed. Jakarta: Rajawali Pers.
- Mahendra, I. Putu Yuda, and Dewa Gede Wirama. 2017. "Pengaruh Profitabilitas, Struktur Modal, Dan Ukuran Perusahaan Pada Earnings Response Coefficient." *E-Jurnal Akuntansi Universitas Udayana* 20(3):2566–94.
- Mehdi, Moradi, Mahdi Saleh, and Zakiheh Erfanian. 2010. "A Study of The Effect of Financial Leverage on Earnings Response Coefficient through out Income Approach: Iranian

- Evidence.” *International Review of Accounting Banking and Finance* 2(2):103–15.
- Paramita, Ratna Wijayanti Damiar. 2012. “Pengaruh Leverage, Firm Size, Dan Voluntary Disclosure Terhadap Earnings Response Coefficient (ERC) (Studi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia).” *Jurnal WIGA* 2(2):103–18.
- Radchobeh, Zeynab, Shaer Biyanani, and Hashem Nikoumaram. 2012. “Evaluation on the Relation between Earning Response Coefficient (ERC) and Financial Leverage.” *Journal of Life Science And Biomedicine* 3(1):83–87.
- Rahayu, L. P. Agustina Kartika, and I. G. N. Agung Suaryana. 2015. “Pengaruh Ukuran Perusahaan Dan Risiko Gagal Bayar Pada Koefisien Respon Laba.” *E-Jurnal Akuntansi Universitas Udayana* 13(2):665–84.
- Rahmawati. 2012. *Teori Akuntansi Keuangan: Dilengkapi Dengan Hasil Penelitian Empiris Di Indonesia*. Pertama. Yogyakarta: Graha Ilmu.
- Sandi, Khoerul Umam. 2013. “Faktor-Faktor Yang Mempengaruhi Earnings Response Coefficient.” *Accounting Analysis Journal* 2(3):337–44.
- Santoso, Gunawan. 2015. “Determinan Koefisien Respon Laba.” *Parsimonia* 2(2):69–85.
- Sari, Merlin, Ratna Paramita, and Muchamad Taufiq. 2018. “Pengaruh Leverage, Profitabilitas Dan Voluntary Disclosure Terhadap Earnings Response Coefficient (ERC) (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Tahun 2014-2016).” Pp. 167–77 in *Conference Progress*. Vol. 1.
- Setiawati, Erma, Nursiam, and Fitri Apriliana. 2014. “Analisis Pengaruh Ukuran, Pertumbuhan Dan Profitabilitas Perusahaan Terhadap Koefisien Respon Laba (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2009-2011).” Pp. 175–88 in *Seminar Nasional dan Call for Paper (Sancall 2014) : RESEARCH METHODS AND ORGANIZATIONAL STUDIES*.
- Subagyo, and Cicilia Novita Olivia. 2012. “Faktor-Faktor Yang Mempengaruhi Earnings Response Coefficient (ERC).” *Jurnal Akuntansi* 12(1):539–58.
- Subramanyam, K. R., and John J. Wild. 2018. *Analisis Laporan Keuangan : Buku 1*. 10th ed. edited by D. Yanti. Jakarta: Salemba Empat.
- Sugiyono. 2018. *Metode Penelitian Bisnis*. 3rd ed. edited by S. Y. Suryandari. Bandung: Alfabeta.
- Susanto, Yulius Kurnia. 2012. “Determinan Koefisien Respon Laba.” *Jurnal Akuntansi & Manajemen* 23(3):153–63.
- Syarifulloh, Rahmat, and Agus Wahyudin. 2016. “Determinan Koefisien Respon Laba.” *Accounting Analysis Journal* 5(1):1–9.
- Utami, Dhiany Nadya. 2020. “Kinerja IHSG Kuartal I/2020 : Sektor Barang Konsumsi Pimpin Kinerja Sektoral.” *Bisnis.Com*.
- Warren, Carl. S., James M. Reeve, Jonathan E. Duchac, Novrys Suhardianto, Devi Sulistyio Kalanjati, Amir Abadi Jusuf, and Chaerul D. Djakman. 2014. *Pengantar Akuntansi-Adaptasi Indonesia*. 25th ed. Jakarta: Salemba Empat.
- Widarjono, Agus. 2013. *Ekonometrika Pengantar Dan Aplikasinya: Disertai Panduan Eviews*. Keempat. Yogyakarta: UPP STIM YKPN.
- www.idx.co.id
- www.finance.yahoo.com