

The Influence of Investment Opportunity Set (IOS) and Return on Assets on The Quality of Earnings With Company Size as A Moderation Variable

Deni Sunaryo

Student of the Doctoral Program in Management Science, Faculty of Economics, Terbuka University and Lecturer at Serang Raya University, Banten Indonesia

E-mail : 530056048@ecampus.ut.ac.id

Etty Puji Lestari

Lecturer of Management Science Doctoral Program, Faculty of Economics, Terbuka University, Banten, Indonesia

Email : ettypl@ecampus.ut.ac.id

Siti Puryandani

Promoter Team for Doctor Program in Management Science, Faculty of Economics, Terbuka University and Lecturer at STIE Bank BPD Central Java, Indonesia

Email : sitipuryandani@gmail.com

Hersugondo

Promoter Team for Doctor Program in Management Science, Faculty of Economics, Terbuka University and Lecturer at Diponogoro University, Indonesia

Email : hersugondo@lecturer.undip.ac.id

Author correspondence: 530056048@ecampus.ut.ac.id

<https://orcid.org/0000-0002-1897-7587>

Abstract. This study aims to examine the effect of investment opportunity set and return on assets on earnings quality with company size as a moderating variable in manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. The sampling technique used was purposive sampling, based on predetermined criteria, there were 171 companies or 513 financial statement data as samples. The analytical method of this study uses multiple linear regression analysis and Moderated Regression Analysis (MRA) with SPSS Version 25. The results show that: 1) Investment Opportunity Set has no significant effect on earnings quality, 2) Return On Assets has a significant effect on earnings quality, 3) company size cannot moderate the effect of investment opportunity set on earnings quality, 4) company size can moderate the effect of return on assets on earnings quality. Future research namely being able to change the category of companies used as research samples, for example companies in the trade, service and investment sector or other companies, can conduct research with a period of more than 3 years, because the larger the number of research samples is expected to produce more accurate data, researchers can add or use other independent variables that can significantly affect earnings quality such as liquidity, leverage, profit growth, dividend policy, accounting conservatism and etc., and it is expected to be able to use other moderating variables which are thought to have more influence

Keywords : Investment Opportunity Set, Return On Assets, Profit Quality, Company Size

INTRODUCTION

Economic growth and technological progress in the current era of globalization have developed rapidly, thus creating intense competition. The current conditions require companies, especially in Indonesia, to increase their credibility in order to be able to compete and survive in their business. Increasing the company's credibility can be seen from the financial reports. Financial reports prepared in accordance with applicable rules and standards will be easier to read and understand. This reflects a good corporate image.

Financial statements are records of a company's financial information in an accounting period to describe a company's performance. In the process of preparing financial statements, the information presented must reflect the actual condition of the company so that it can be used by users as a basis for decision making. Financial reports are a form of corporate management accountability to stakeholders, such as shareholders, investors, creditors, the government, the general public and other stakeholders (Indriana and Handayani, 2021).

Important information that can be used as a benchmark in making decisions is profit. Profit provides information about the performance of the management in carrying out their duties. An important aspect that is used as a reference by internal and external parties is high quality profits. Profits can be said to be of high quality if reported profits can be used by users of financial statements to make the best decisions and meet the qualitative characteristics, it can be said that profits in financial statements are high quality profits (Fathussalmi et al., 2019). Therefore, reliable earnings quality information can trigger a positive response from stakeholders who need these financial reports.

A positive response can be seen in companies that have high quality earnings where these companies tend to attract and invest more investors. Conversely, if the quality of the company's earnings tends to be low, investors will most likely hesitate to invest in the company because investors assume that if the company's earnings quality is low, the company's financial performance is deteriorating and profit conditions are unstable and may continue into the future (Setiawan, 2017).

The quality of earnings information contained in a company's financial statements is a major concern, because earnings information is important information for investors to make investment decisions. Profits that are not qualified will mislead investors' decisions. (Setiawan, 2017). The importance of earnings quality information for investors and users of

financial statements, makes all companies compete to increase their profits. The increase in profits or profits obtained by a company provides loopholes for certain parties who compete unfairly to gain individual benefits from company profit information. This can affect the increase in firm value so that it motivates managers to take inappropriate actions, for example management can practice profit-oriented accounting practices to achieve certain performance.

In the current conditions, there is still unhealthy competition carried out by business people to achieve their goals by practicing profit manipulation. As happened at PT Kimia Farma, PT Kimia Farma is one of the government-owned pharmaceutical companies in Indonesia. When audited on December 31, 2001, the management of PT. Kimia Farma reported a net profit of Rp 132 billion. However, BUMN and Bapepam feel that the net profit is too high and contains elements of engineering. After being re-audited, on October 3, 2002, the presentation of Kimia Farma's 2001 financial statements again found a fairly basic error. In the new financial statements, the reported profit was less than IDR 99.56 billion, namely IDR 32.6 billion, or 24.7% of the initial reported profit. In the end, Kimia Farma was subject to sanctions and fines. (Source: <https://www.cnbcindonesia.com>, accessed 20 October 2021).

The phenomenon that occurs at PT Kimia Farma Tbk shows that in the midst of the world economy, the practice of profit manipulation is not new. This action is taken so that the company's financial statements always look good so that investors do not give a bad value and will be interested in investing in the company.

In the perspective of agency theory, it can be seen that there is an imbalance of information between management (agent) and investors (principal). Because management has more information and has more power in the company to make decisions, so management reports profits in opportunities , namely by managing profits to maximize their personal interests (Setiawan, 2017) . As a result, external parties such as investors do not trust the company and do not want to invest in the company's shares.

Investment opportunities from these investors are commonly referred to as Investment Opportunity Sets (IOS). Investment Opportunity Set (IOS) is an opportunity for a company to grow well. According to Indriana & Handayani (2021) Investment Opportunity Sets (IOS) are future investment options that allow companies to grow and develop. A well-developed company can be assessed in terms of increasing sales, creating new products, developing capacity, increasing assets, and long-term investment. High Investment Opportunity Set (IOS). companies have high growth opportunities and can affect the level of profit and the

quality of earnings information (Indriana and Handayani, 2021) . This can attract investors to invest in the hope of obtaining profits in the future . The underlying values that are decided upon today will influence future investment decisions. If the manager takes the wrong steps in determining current decisions, future investment opportunities will also be disrupted.

As is the case with PT. Garuda Indonesia for the 2018 financial statements, PT. Garuda Indonesia Persero (Tbk) released its 2018 financial reports today (26/7/2019) for sanctions from the Financial Services Authority (OJK). This is because it is proven that state-owned airlines have manipulated the bookkeeping of financial statements of Rp. 11.3 billion . After being restated, it was found that Garuda recorded a net loss of Rp. 2.45 trillion. (Source: <https://money.kompas.com> , accessed 20 October 2021). Phenomenon of PT. Garuda Indonesia Tbk proves that managers make decisions by manipulating financial reports which result in disrupted investment opportunities in the future, this makes investors doubt the quality of earnings in financial reports to invest in the company. Research conducted by Agustina et al., (2017) , Murniati et al., (2018) , Dewi et al., (2020) , and Indriana & Handayani (2021) stated that investment opportunity sets affect earnings quality. Meanwhile, research conducted by Fathussalmi et al., (2019) , Zulman & Abbas (2019) , Dachi & Herawaty (2019) obtained research results that Investment Opportunity Set did not affect earnings quality.

Return On Assets is a ratio that can measure the level of management effectiveness in a company and to evaluate its ability to generate profits (Setiawan, 2017) . Return On Assets in a company is described as the company's ability to generate profits during a certain period at the level of sales, assets and existing capital in the company. In this study, Return On Assets is proxied by Return On Assets (ROA). Return On Assets (ROA) is a company's ability to generate profits from the total assets owned by the company. Return on assets (ROA) is used to generate profits and measure the effectiveness of a company in using its assets. The higher the Return On Assets (ROA) of a company, the higher the company's profits. So that the company has good earnings quality (Zulman & Abbas, 2019) .

According to Indriana & Handayani (2021) argues that Return On Assets (ROA) provides a measure of the level of effectiveness of company management in generating profits from sales and investment income. Profit growth that increases every year can provide a quality profit information, describing a good company performance. So, the higher the value of Return On Assets , the more investors who invest in the business. According to Indriana & Handayani (2021) the result is that Return On Assets has a significant effect in a

negative direction on earnings quality. Whereas in the research of Zulman & Abbas (2019) , Setiawan, (2017) , conducting research in the results of his research said that Return On Assets does not affect earnings quality, because the smaller the Return On Assets of a company, the lower the quality of its earnings.

Company size is a measure that can be classified as the size of a company. A company size can determine whether or not the performance of a company is good, investors usually trust large companies more. This is because large companies are considered capable of continuing to improve their company's performance by trying to improve the quality of their profits (Marpaung, 2019) . According to Setiawan, (2017) Company size is a measurement of companies that are grouped according to the size of the company based on the total assets of a company, if the greater the total assets, the greater the size of the company. Therefore, a large company size will increase the confidence of investors to invest. Company size can be related to the quality of earnings, because the larger the size of a company, the higher the business continuity of the company and this can increase its profits, so that the profits earned will be quality profits. Small company sizes are considered to practice more earnings management than large companies. This is because small companies tend to want to show the condition of companies that always perform well so that investors invest in these companies so that they unknowingly make these companies have low earnings quality. Company size is used as a moderating variable based on previous research which discusses the influence company size on earnings quality, as research conducted by Setiawan (2017) , Agustina et al., (2017) , and Kusumawati & Wardhani (2018) , shows that there is an effect of company size on earnings quality. Meanwhile, research conducted by Zulman & Abbas (2019) shows that company size does not affect earnings quality.

The moderating variable is used to assess whether the relationship between the dependent variable and the independent variable will get stronger or weaker in the presence of a moderating variable. Judging from previous research by Marpaung (2019) with the title Effects of Leverage, Liquidity and Firm Size as Moderating Variables on Profit Quality and previous research by Laoli & Herawaty (2019) with the title Effects of Return On Assets , Growth , Leverage, Operating Cycle and Prudence on Earning Quality with Firm Size as a Moderating Variable. The two results of this study show that firm size can moderate the effect of independent variables on earnings quality.

STUDY OF LITERATURE

Profit Quality

Profit (income - also called earnings or profit) is a summary of the net results of business operating activities in a certain period expressed in financial terms (Subramanyam & Wild, 2014: 109). Profit information is one of the important information in the financial statements. Profit information presented in the financial statements will be used by users of financial statements to evaluate the company's performance in the past, and to predict the company's potential in the future (Kusumawati & Wardhani, 2018) . Earnings quality (or rather, accounting quality) means different things to different parties. Many parties define earnings quality as the extent to which companies apply conservatism, companies with high earnings quality are expected to have a higher price to earnings ratio than companies with lower earnings quality. Earnings quality is the amount of profit that can be consumed in one period by maintaining the company's ability at the beginning and end of the period by maintaining the company's ability at the beginning and end of the period remains the same . The quality of earnings is higher if it approaches the initial plan or exceeds the target from the initial plan. The quality of earnings is low because in presenting earnings it does not match the truth so that the information obtained from the earnings report is biased, the impact is misleading creditors and investors in making decisions (Setiawan, 2017) . Earnings quality has an important role in assessing the suitability of reported earnings figures and can be used to assess company performance. Understanding the quality of earnings in a company is one thing in processing and analyzing information where a high quality profit rate will reflect the performance of an operation at this time and become an indicator of operational performance in the future. Low earnings quality can be caused by several factors including a lack of knowledge and expertise in preparing financial reports to prepare financial reports in accordance with financial accounting standards in force in Indonesia. According to Basuki (2018) profit can be said to be of high quality if it has the following three characteristics:

Being able to accurately reflect the current operating performance of a company, being able to provide a good index of company performance in the future , can be a good measure for assessing company performance. There are several opinions to measure the quality of earnings. Research conducted by Septiyani et al., (2017) earnings quality is measured using the Quality Of Earning Ratio (QE) , this ratio shows the variance between cash flow and net profit with the formula:

Quality Of Earning Ratio (QE) = (Operating Cash Flow)/(Net profit)

Meanwhile, the research conducted by Murniati et al. (2018) measures the quality of earnings using the Quality Of Income (QI) with the formula:

Quality Of Earning Ratio (QE) = (Operating Cash Flow)/EBIT

In this study the authors use the Quality Of Earning Ratio (QE) in measuring earnings. The reason the author uses this formula is because earnings quality is the relationship between accounting profit and cash flow. The higher the ratio, the higher the quality of earnings because the greater the operating profit realized in cash.

Investment Opportunity Set (IOS)

According to Zulman & Abbas (2019) Investment Opportunity Set is an opportunity for companies to grow so that the investment opportunity set is used as a basis for determining the classification of company growth in the future. Indriana & Handayani (2021) Investment Opportunity Sets (IOS) are future investment options that allow companies to grow and develop. Well-developed companies can be assessed in terms of increasing sales, creating new products, increasing capacity, increasing assets, and long-term investment.

Growth opportunities owned by the company can be realized through investment activities. Companies that most of their investment can generate high returns, later the company can increase growth. According to Myers (1977) states that IOS is the present value of the company's choice to make investments in the future. Can be used to determine the value of assets and company value in the future (Agustina et al., 2017) . Companies with high levels of Investment Opportunity Set (IOS) can attract investors to invest. Cahan and Hossain (1996) show that company managers with higher IOS are motivated to disclose more information related to the company's prospects in the future .

The measurements used in calculating the Investment Opportunity Set in this study are: Market to Book Value Equity (MBVE), namely the proxy reflects that the market assesses the return on the company's investment in the future from the expected return on its equity. Market to book value equity y can be calculated using the formula (Pardosi et al., 2019) :

MVE/BE = (Number of Shares x Closing Price)/(Total Equity)

Return On Assets (ROA)

Profitability is a ratio that can assess the measurement of management effectiveness in a company and to assess the company's ability to make a profit (Setiawan, 2017) . The higher the value of Return On Assets , the company will tend to do income smoothing because companies that have high Return On Assets reflect good company performance so that investors are interested in investing in the company (Arum et al., 2017) . Return On Assets is measured using a ratio, if the level of Return On Assets ratio increases (high), it will show that the condition of the company is getting better, with a high Return On Assets it can show that the company has a good ability to generate profits. In addition, a high level of Return On Assets will increase the competitiveness of companies, because companies that have high profit levels indicate the company's growth in the future. However, if the level of return on assets of the company is low, it can indicate the quality of the company's earnings is low, or it can even indicate that the company is in a loss condition. In this study the probability used is: Return On Assets (ROA), Return On Assets or what is known as the return on assets ratio is used to assess the comparison between profits and total assets of the company. Return on assets (ROA) is used to generate profits and measure the effectiveness of a company in using its assets. The higher the Return On Assets (ROA) of a company, the higher the company's profits. So that the company has good earnings quality (Zulman & Abbas, 2019) . Return On Assets (ROA) can be obtained by using the following formula :

$$\text{Return On Assets} = (\text{Net Income}) / (\text{Total Assets})$$

Company Size

Company size is the size of a company that can be classified in various ways, including revenue size, total assets and total equity (Agustina et al., 2017) . Basically the company group consists of several size groups, namely large, medium and small companies. Size is the size of the company which can be seen from the company's total assets at the end of the year. Company size describes the size of the company. The size of the business is seen from the field of business being run. Determination of the size of the company can also be determined from total sales, total assets, average level of sales, revenue size and total equity. According to Setiawan, (2017) company size is related to profit quality because the bigger the company, the higher the business continuity of a company in improving financial performance so that companies do not need to practice profit manipulation. So, company size is measured by the company's total assets. Large companies have relatively large growth

compared to small companies, so the rate of return on shares of large companies is greater than the rate of return on shares of small companies. Therefore, the larger the size of the company will increase the confidence of investors to invest. Company size can be determined by various values such as total assets, sales, capital, profits and others, these values can determine the size of the company. The company size indicator can be done in two ways , namely by using the logarithm of natural assets, namely by the following formula:

$$\text{Company Size} = \text{Ln Total Assets}$$

RESEARCH METHODS

This research is a quantitative research, the research design used is a causal associative research design. researchers conducted research on manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2021 period. The data used are financial reports downloaded from the IDX's official website, namely www.idx.co.id as secondary data . The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange for the 2019-2021 period, totaling 193 companies. The sampling technique used in this study used the purposive sampling method. From the results of sampling using the purposive sampling method, a representative sample of 171 companies was obtained and the analysis was carried out for three years, so that the total sample was 513 observational data. Methods of data analysis in this study using descriptive statistics, classic assumption test, MRA, and hypothesis testing. For data analysis using multiple regression (multiple regression) to test the effect of the independent variables on the dependent.

DISCUSSION

Descriptive statistical tests were used in this study to determine the maximum, minimum, average and standard deviation values of each variable. The dependent variable in this study is earnings quality (QE). The independent variables used in this study are Investment opportunity set (IOS) and Return On Assets (ROA) . While the moderating variable used in this study is Firm Size . The results of descriptive statistical test calculations using SPSS 25 are presented in the following table:

Table 1
Descriptive Test Results

Descriptive Statistics					
	N	Minimum	Maximum	Means	std. Deviation
Investment Opportunity Sets	414	-5.01	36.28	2.0128	3.30732
Return On Assets	414	-2.79	.61	.0171	.21224
Profit Quality	414	-3.84	5.88	.9514	1.52411
Company Size	414	20.23	33.54	28.4914	1.68406
Valid N (listwise)	414				

Source: SPSS Data Processing Output Version 25, 2023

Table 1 above shows valid data in this study as many as 414 data after deducting outlier data. The explanation of the descriptive statistics for each variable is as follows:

Investment Opportunity Set (IOS)

Based on table 1 it is known that the minimum value of the Investment Opportunity Set variable (X1) is -5.01 , meaning that the company does not have investment opportunities for the company's growth in the future. Meanwhile, a company that has a maximum value of 36.28 means that there are investment opportunities for the company's growth in the future. The average value (Mean) of the Investment Opportunity Set variable (X1) is 2.0128 with a standard deviation value of 3.30732.

Return On Assets (ROA)

Based on table 1 it is known that the minimum value on the variable Return On Assets (ROA) (X2) is -2.79 , meaning that manufacturing companies are less able to generate profits because the minimum value is -279%. While a company that has a maximum value of 0.61 means that the company is able to generate a maximum profit of 61%. This condition illustrates that the company has a good financial condition. The average value (Mean) of the variable Return On Assets (ROA) (X2) is 0.171 with a standard deviation value of 0.21224 .

Profit Quality

Based on table 1, it is known that the minimum value on the variable Quality of earnings (Y) is -3.84, meaning that the profit quality of manufacturing companies is quite low and the maximum value is 5.88, meaning that the quality of manufacturing company profits can be used as a reflection of good earnings quality by the company. The average value

(Mean) of the earnings quality variable (Y) is 0.0171 with a standard deviation value of 1.52411.

Company Size

Based on table 1, it is known that the minimum value of the company size variable (Z) is 20.23 , meaning that a company with a minimum value means that the total assets owned by the company are 20.23 or 20.23%. While the maximum value is 33.54 , meaning that the total assets owned by manufacturing companies are at most 33.54%. The average value (Mean) of the firm size variable (Z) is 28.4914 with a standard deviation value of 1.68406.

Classic assumption test

In order for the regression model used in this study theoretically to produce parametric values that are in accordance with the assumption of multiple regression, the classical assumption test must first be carried out. The classic assumption test conducted in this study is described as follows:

Normality test

The Normality Test aims to test whether in the regression model, the confounding or residual variables have a normal distribution (Ghozali, 2018: 161). The results of the normality test using the Kolmogorov-Smirnov statistical test in this study are presented in table 4.2 below:

Table 2
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residuals
N		414
Normal Parameters ^{a,b}	Means	-3.3218102
	std. Deviation	1.61049768
Most Extreme Differences	absolute	.040
	Positive	.040
	Negative	-.026
Statistics Test		.040
asympt. Sig. (2-tailed)		.127 ^c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

Source: SPSS Data Processing Output Version 25, 2022

the Kolmogorov-Smirnov Test normality test show that the Asymp value is low. Sig. (2-tailed) of 0.127. The significance value is $0.127 > 0.05$ which means that the research data is normally distributed.

Multicollinearity Test

The multicollinearity test aims to test whether there is a correlation between the independent variables in the regression model (Ghozali, 2018: 107). The multicollinearity test in this study uses a method by looking at the value of the variance inflation factor (VIF) and the tolerance value . The results of the multicollinearity test are presented in the following table:

Table 3
Multicollinearity Test Results

Coefficients ^a			
Model		Collinearity Statistics	
		tolerance	VIF
1	(Constant)		
	Investment Opportunity Sets	.965	1036
	Return On Assets	.883	1.132
	Company Size	.914	1,094

a. Dependent Variable: Profit Quality

Source: SPSS Data Processing Output Version 25.2022

Based on table 3 the multicollinearity test results for each variable show that the tolerance value is > 0.1 and the variance inflation factor is < 10 . This means that in the results of this study the regression model does not occur multicollinearity.

Autocorrelation Test

This test is to test whether in the linear regression model there is a correlation between the confounding errors in a certain period and the confounding errors in the previous period. The autocorrelation test used in this study is the Durbin-Watson (DW) statistical test. The results of the autocorrelation test can be seen in table 4

Table 4

Autocorrelation Test Results

Summary Model ^b					
Model	R	R Square	Adjusted R Square	std. Error of the Estimate	Durbin-Watson
1	.228 a	.052	.045	1.48926	1.862

- a. Predictors: (Constant), Company Size, Investment Opportunity Set, Return On Assets
- b. Dependent Variable: Profit Quality

Source: SPSS Data Processing Output Version 25.2022

Based on table 4, the results of the autocorrelation test with Durbin-Watson obtained a value of 1.862. The Durbin-Watson (DW) value obtained will be compared with the table at a significance of 0.05 or 5%. With N = 414 and K = 3, dL = 1.8241 and dU = 1.8533 are obtained . So the results show that the regression model used is included in the testing area $Du < d < 4-Du$, namely $1.8533 < 1.862 < 2.1467$, which means that in this study there was no autocorrelation.

Heteroscedasticity Test

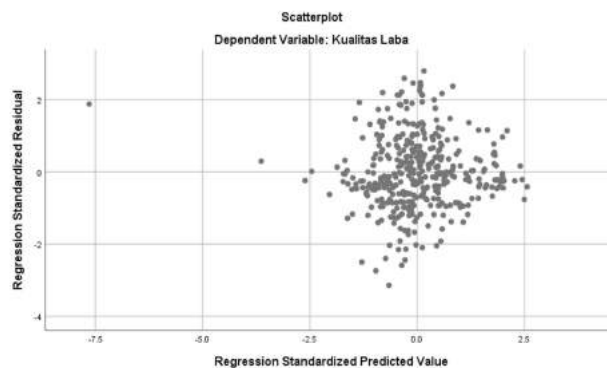


Figure 4.1

Heteroscedasticity Test Results

Source: SPSS Data Processing Output Version 25, 2021

This test aims to test whether in the regression model there is an inequality of variance from one residual observation to another. The heteroscedasticity test used in this study is by looking at the scatterplot graph . The results of this heteroscedasticity test can be seen in Figure 1. Based on Figure 1, it can be seen that in this study there was no

heteroscedasticity because there was no clear pattern, and the dots spread above and below the number 0 on the Y axis

Multiple Linear Regression Test

Multiple regression tests are used to determine the influence of the independent variables on the dependent variable. The results of multiple linear regression analysis can be seen in table 5 below:

Table 4.5
Multiple Linear Regression Test Results

Model		Coefficients ^a		
		Unstandardized Coefficients		Standardized Coefficients
		B	std. Error	Betas
1	(Constant)	.942	.087	
	Investment Opportunity Sets	-.004	.023	-.008
	Return On Assets	1.008	.357	.140

a. Dependent Variable: Profit Quality

Source: SPSS Data Processing Output Version 25, 2021

Based on table 4.5, the regression equation model in this study is as follows:

$$Y = 0,942 - 0,004X_1 + 1,008X_2 + e$$

In the multiple linear regression equation model above, it can be interpreted as follows:

1. Constant

The constant value is 0.942. This shows that if the value of the investment opportunity set variable and Return On Assets is zero, then the earnings quality variable has a value of 0.942.

2. Investment Opportunity Sets

investment opportunity set variable has a regression coefficient with a negative direction of -0.004. This means that if the investment opportunity set variable increases while other variables remain the same, it will result in a decrease in the quality of earnings by 0.004.

3. Return On Assets

Return On Assets variable has a regression coefficient with a positive direction of 1.008. This means that if the Return On Assets increases by one while other

variables remain the same, it will result in an increase in the quality of earnings by 1.008.

Moderated Regression Analysis (MRA) Test

Moderation regression analysis aims to find out whether the moderating variable will strengthen or weaken the relationship between the independent variables and the dependent variable (Ghazali, 2018) . The results of the Moderated Regression Analysis (MRA) test can be seen in table 6 below:

Table 6
Moderated Regression Analysis (MRA) Test Results

Model		Coefficients ^a		
		Unstandardized Coefficients		Standardized Coefficients
		B	std. Error	Betas
1	(Constant)	-4,231	1,540	
	Investment Opportunity Sets	.090	.399	.195
	Return On Assets	-5,915	2,275	-.824
	Company Size	.181	.054	.200
	IOS with Enterprise Size	-.004	.014	-.226
	Return On Assets with Company Size	.267	.092	.922

a. Dependent Variable: Profit Quality

Source SPSS version 25, data processed by researchers in 2022

Based on table 6, the regression equation model is obtained as follows:

$$Y = -4,231 + 0,090X_1 + 0,181Z - 0.004X_1Z$$

$$Y = -4,231 - 5,915X_2 + 0,181Z + 0.267X_2Z$$

OR

In the equation model above, it can be interpreted as follows:

1. Constant

The constant value is -4.231. This shows that if the other variables are 0, the quality of earnings is -4.231.

2. Investment Opportunity Sets

Investment Opportunity Set variable has a regression coefficient value of 0.090. This means that if the investment opportunity set increases while other variables remain the same, it will result in an increase in earnings quality of 0.090.

3. Return On Assets

Return On Assets variable has a regression coefficient value of -5.915. This means that if the p Return On Assets increases by one while other variables remain the same, it will result in a decrease in the quality of earnings of 5.915.

4. Company Size

The firm size variable has a regression coefficient of 0.181. This is if the size of the company increases by one while other variables remain the same, it will result in an increase in earnings quality of 0.181.

5. Investment Opportunity Set Interaction With Company Size

Investment opportunity set which is moderated by firm size has a regression coefficient of -0.004. This means that if the investment opportunity set , which is moderated by firm size, increases by one while other variables remain the same, it will result in a decrease in earnings quality of 0.004.

6. Return On Assets Interaction With Company Size

Return on assets moderated by firm size has a regression coefficient of 0.267. This means that if the Return On Assets , which is moderated by the size of the company, increases by one while other variables remain the same, it will result in an increase in earnings quality of 0.267.

Hypothesis testing

Statistical Test t (Partial)

The t statistical test basically shows how far the influence of one explanatory/independent variable individually explains the variation of the dependent variable (Ghazali, 2018:98) . In this test the results will determine whether the proposed hypothesis will be accepted or rejected. The results of the t (partial) statistical test are as follows:

Table 7
Statistical Test Results t (Partial)

Coefficients ^a			
Model	Standardized Coefficients	t	Sig.
	Betas		
(Constant)		10,814	.000
Investment Opportunity Sets	-.008	-.169	.866
Return On Assets	.140	2,823	.005

a. Dependent Variable: Profit Quality

Source: SPSS Data Processing Output Version 25, 2022

The research results in table 7 can be explained as follows:

1. The Effect of Investment Opportunity Set on Profit Quality

Based on the SPSS results, the β coefficient value is -0.008 indicating a negative direction, then the calculated t value is -0.169 with a significance value of 0.866. Based on the t distribution table, the results of the t table are 1.9657. Because t count < t table (-0.169 < 1.9657) and the value of Sig. > 0.05 (0.866 > 0.05) it can be concluded that H1 is rejected which means that the investment opportunity set has no significant effect on earnings quality.

2. Effect of Return On Assets on Earnings Quality

Based on the SPSS results, the β coefficient value was 0.140 indicating a positive direction, then the t table value was 2.823 with a significance value of 0.005. Based on the t distribution table, the result of t table is 1.9657 because t count > t table (2.823 > 1.9657) and the value of Sig. < 0.05 (0.005 < 0.05). So it can be concluded that H2 is accepted, which means that Return On Assets has a significant effect on earnings quality.

Moderated Regression Analysis (MRA) Test

Moderation regression analysis aims to find out whether the moderating variable will strengthen or weaken the relationship between the independent variables and the dependent variable (Ghazali, 2018). The results of the Moderated Regression Analysis (MRA) test can be seen in table 8 below :

Table 8
Moderated Regression Analysis (MRA) Test Results

Coefficients ^a					
Model		Standardized Coefficients		t	Sig.
		Betas			
1	(Constant)			-2,748	.006
	Investment Opportunity Sets		.195	.225	.822
	Return On Assets		-.824	-2,600	.010
	Company Size		.200	3,357	.001
	IOS with Enterprise Size		-.226	-.261	.794
	Return On Assets with Company Size		.922	2,904	.004

a. Dependent variable: Earnings Quality

Source: SPSS data processing output 25, 2022

Based on table 4.8 the results of the MRA test can be explained as follows:

1. The Influence of Investment Opportunity Set on Earnings Quality With Company Size As Moderating Variable

Based on the SPSS results, the β value of the Investment Opportunity Set interaction with a company size of -0.226 is obtained. If seen from the value of the coefficient β the first moderation interaction has a negative value, it can be interpreted that the presence of company size will weaken the effect of Investment Opportunity Set on earnings quality. However, the size of the company moderates the relationship between Investment Opportunity Set and earnings quality, which has a negative effect, thereby reinforcing the decline in earnings quality.

If you look at the value of Sig. > 0.05 ($0.794 > 0.05$) it can be concluded that H_3 is rejected, which means that the firm size variable cannot moderate the effect of Investment Opportunity Set on earnings quality.

2. Effect of Return on Assets on Earnings Quality with Company Size as a Moderating Variable

Based on the SPSS results, the β value of Return On Assets interaction with company size is 0.922. If seen from the value of the β coefficient of the moderation interaction has a positive value, it can be interpreted that the presence of company size will strengthen the effect of Return On Assets on earnings quality. Previously Return On Assets had a positive influence which caused an increase in earnings quality.

However, the size of the company moderates the relationship between Return On Assets and earnings quality, which has a positive effect, thereby reinforcing the increase in earnings quality.

If seen from the value of Sig. < 0.05 ($0.004 < 0.05$) it can be concluded that H_4 is accepted, which means that the variable firm size can moderate the effect of Return On Assets on earnings quality.

Determination Coefficient Test (R^2)

The coefficient of determination (R^2) basically measures how far the model's ability to explain the variation of the dependent variable. If the number of Independent variables is more than two, it is better to use Adjusted R Square, whereas if the number of Independent variables is less than two or two, it is better to use R Square (Santoso, 2015). A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable (Ghazali, 2018:97). The results of the test for the coefficient of determination can be seen in Tables 9 and 4.10 below :

Table 49
Test Results for the Coefficient of Determination of Multiple Linear Regression

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.139 ^a	.019	.015	1.51298

a. Predictors: (Constant), Return On Assets, Investment Opportunity Set

Source: SPSS Data Processing Output Version 25, 2022

Based on table 9 above it is known that the R value (Correlation Coefficient) is 0.139, the R Square value is 0.019 and the Adjusted R Square is 0.015 or 1.5%. This shows that the quality of earnings is influenced by the Investment Opportunity Set and Return On Assets of 1.5%, while the remaining percentage, which is 98.5%, is influenced by other variables that are not included in this research model.

Table 10

Moderated Regression Analysis (MRA) Determination Coefficient Test Results

Summary models				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.267 ^a	.071	.060	1.47769

a. Predictors: (Constant), Return On Assets with Company Size, Investment Opportunity Set, Company Size, Return On Assets , IOS with Company Size
 Source: SPSS Data Processing Output Version 25, 2022

Based on table 10 above, it is known that the R value (Correlation Coefficient) is 0.267 and the R Square value is 0.071 and the adjusted R Square value is 0.060 or 6%. This shows that earnings quality is influenced by Investment Opportunity Set, Return On Assets and company size as a moderating variable of 6%. While the remaining percentage is equal to 94% earnings quality is influenced by other variables that are not included in this research model.

Discussion of Hypothesis Test Results

The Effect of Investment Opportunity Set on Profit Quality

Based on the results of the partial regression analysis test, it shows that the investment opportunity set has no significant effect on the quality of earnings in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. Fathussalmi et al., (2019) argues that there is no effect on the investment opportunity set , that is because the investment opportunity set is not the center of attention of investors. This is because investors don't really look at the value of the company's investment opportunity set , but rather they look at how the company's profit figures are. This is because the investment opportunity set measures by using how the circulation of shares is also the equity value of a company, which is not really used as a guide for investors if they want to invest in a company. The results of this study are in line with Pardosi et al., (2019) , Zulman & Abbas, (2019) and Dachi & Herawaty, (2019) who obtained the results of the investment opportunity set study that did not affect earnings quality.

Effect of Return On Assets on Earnings Quality

Based on the results of the partial regression analysis test, it shows that Return On Assets has a significant effect on the quality of earnings at manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021 in a positive direction. This shows that the higher the Return On Assets will have an impact on increasing the quality of company profits. Based on the signal theory which is used as the basis of this study, it is explained that managers should provide company financial information to external parties, especially investors, to make decisions. Companies must report profit information in accordance with actual conditions, because if it is not in accordance with the actual conditions of the company, it will result in misleading users of financial statements so that they make wrong decisions. A profitable company can indicate that the company is in good condition and has good prospects and can improve the quality of its earnings. The results of this study are in accordance with the research that has been conducted by Ardianti, (2018) , Indriana & Handayani, (2021) and Laoli & Herawaty, (2019) which results that Return On Assets has a significant effect on Return On Assets with a positive direction on earnings quality. This has a positive impact on the company because companies that have a stable level of Return On Assets can attract investors to invest their capital. For investors, high profits describe large profits.

The Influence of Investment Opportunity Set on Earnings Quality With Company Size As Moderating Variable

Moderated Regression Analysis test , it shows that company size cannot moderate the effect of Investment Opportunity Set on earnings quality in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. This is because large-scale companies or small-scale companies do not guarantee that investors will invest in these companies, because investors are more concerned with the numbers of the company's profits (Fathussalmi et al., 2019) . Large companies or small companies are always developing to achieve their goals, namely always increasing company profits and the quality of their profits. According to Wati & Putra, (2017) that companies that have large total assets and are classified as large companies that can easily have access to funding sources and have a good level of financial performance do not guarantee that the quality of profits generated by the company will be high. This results in companies that are relatively large in size, have large profit potential and have large business risks. Also, due to the large company infrastructure, the company's operational costs are also large.

Effect of Return On Assets On Profit Quality With Company Size As Moderating Variable

Moderated Regression Analysis test , it shows that company size can moderate the effect of Return On Assets on earnings quality in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021 in a positive direction. Based on the signal theory used as the basis in this study, it states that a profitable company will give a signal that the company is in good condition. Companies that are more profitable will disclose more information to their stakeholders about good performance (Ginting, 2017) . The company manager certainly tries to keep the company profitable. This is so that the company can give a positive signal to investors. The increasing ability of a company to generate profits will show the company's success in managing, allocating and maintaining company assets. Good company financial performance without any company earnings management practices will certainly improve the quality of company profits. Company size will strengthen the influence of the company's Return On Assets in improving the quality of company profits. Large companies that are large in size have reached the mature stage and the companies are relatively more stable so that they are able to generate greater profits compared to small companies. So that companies with a large size will find it easier to generate profits, a high and stable profit level will make the quality of earnings better . Companies with larger company sizes have good performance and systems to manage, control and manage their assets. Therefore, the company will easily generate profits and with a good system the company will generate increasing and stable profits in each period so that the quality of the company's profits will be even better. The results of this study are in line with research by Lestari (2020) and (Laoli & Herawaty, 2019) which state that company size can moderate the effect of Return On Assets on earnings quality.

CONCLUSION

Based on the results of the analysis and discussion in the previous chapter , the conclusion of this study is that the Investment Opportunity Set has no significant effect on the quality of earnings in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. This is because the Investment Opportunity Set is not the main focus of investors in making investments. Investors are more focused on published profit figures. Return On

Assets affects the quality of earnings in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. This shows that the higher the company's Return On Assets will have an impact on increasing the quality of company profits. This reflects a profitable company can indicate that the company is in good condition and has good prospects and can increase the quality of earnings. Company size cannot moderate the effect of Investment Opportunity Set on earnings quality in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. This is because companies with large or small scale do not guarantee that investors will invest their capital in the company because investors are more concerned with the figure of the company's profits. Company size can moderate the effect of Return On Assets on earnings quality in manufacturing companies listed on the Indonesia Stock Exchange in 2019-2021. This shows that large-scale companies have good performance and systems for managing, controlling and managing their assets so that the company will generate increasing profits.

Future research is expected to be able to present even higher quality research results with some input regarding a number of things including, for future researchers, namely being able to change the category of companies used as research samples, for example companies in the trade, service and investment sector or other companies, can conduct research with a period of more than 3 years, because the larger the number of research samples is expected to produce more accurate data, researchers can add or use other independent variables that can significantly affect earnings quality such as liquidity, leverage, profit growth, dividend policy, accounting conservatism and etc., and it is expected to be able to use other moderating variables which are thought to have more influence which can moderate the relationship of the independent variables to earnings quality significantly. For Investors, namely For investors, the results of this research are expected to provide input in making investment decisions, and can be used as a benchmark for investors to assess the quality of company profits to be invested and For Companies, namely the information obtained from this research should be used as a consideration in decision-making in order to improve the quality of company profits through Investment Opportunity Sets and Return On Assets , in order to be able to attract investors in investing shares in the company.

THANK-YOU NOTE

Acknowledgments to the Team Promoter and Co-Promoter of the Doctor of Management Science Program Terbuka University Indonesia for facilitating this research so that it can be completed in accordance with the allotted time.

BIBLIOGRAPHY

- Agustina, K., Jaya, A., & Wirama, DG (2017). Effect of Investment Opportunity Set, Liquidity, and Company Size on Earnings Quality. *E-Journal of Accounting* , 21 (3), 2195–2221. <https://doi.org/10.24843/EJA.2017.v21.i03.p18>
- Ardianti, R. (2018). The Influence of Tax Allocations Between Periods, Profit Persistence, Profitability, and Liquidity on Lab Quality (Empirical Study of Manufacturing Companies Listed on IDX in 2012-2016). *Journal of Accounting* , 6 (1), 85–102. <https://doi.org/10.24964/ja.v6i1.593>
- Arum, HN, Nazar, MR, & Aminah, W. (2017). Profitability, Company Size, and Company Value Against Profit Smoothing Practices. *Journal of Contemporary Accounting Research* , 9 (2), 71–78. <https://doi.org/10.23969/jrak.v9i2.581>
- Basuki. (2018). Effect of Company Size, Liquidity and Investment Opportunity Set on Earnings Quality. *Journal of Accounting and Finance* , 2 (1).
- Dachi, B., & Herawaty, V. (2019). Analysis of the Influence of Corporate Governance, Investment Opportunity Set and Audit Quality on Profit Quality Moderated by Ifrs Implementation. *Journal of Trisakti Master of Accounting* , 4 (2), 95. <https://doi.org/10.25105/jmat.v4i2.5061>
- Dewi, IGAS, Made, EID, & Arizona, PE (2020). The Influence of Leverage, Investment Opportunity Set (IOS), and Good Corporate Governance Mechanisms on Profit Quality in Manufacturing Companies on the IDX. *Jurna Kharisma* , 2 (1). https://www.slideshare.net/maryamkazemi3/stability-of-colloids%0Ahttps://barnard.edu/sites/default/files/inline/student_user_guide_for_spss.pdf%0Ahttp://www.ibm.com/support%0Ahttp://www.spss.com/sites/dm-book/legacy/ProgDataMgmt_SPSS17.pdf%0Ahttps://www.n
- Fathussalmi, F., Darmayanti, YD, & Fauziati, PF (2019). The Influence of Investment Opportunity Set and Corporate Governance on Profit Quality (Empirical Study of Manufacturing Companies Listed on the IDX in 2011-2015). *Indonesian Accounting and Business Review* , 3 (2), 124–138. <https://doi.org/10.18196/rab.030240>
- Fitrianita, V., & Coryanata, I. (2019). The Effect of Good Corporate Governance on Profit Quality in Real Estate and Property Companies. *Journal of Accounting* , 8 (2), 67–76. <https://doi.org/10.33369/j.accountancy.8.2.67-76>
- Ghazali, I. (2018). Multivariate Analysis Application With SPSS Program. In A. Tejokusumo (Ed.), *Diponegoro University Publishing Agency* (9th ed.). Diponegoro University Publishing Agency .
- Ginting, S. (2017). The Influence of Profitability, Liquidity and Company Size on Profit Quality in Registered Manufacturing Companies. *Journal of Microskil Economic Wira* , 7 (2), 227–236.
- Hasanuddin, R., Darman, D., Taufan, MY, Salim, A., Muslim, M., & Putra, AHPK (2021).

The Effect of Firm Size, Debt, Current Ratio, and Investment Opportunity Set on Earnings Quality: An Empirical Study in Indonesia. *Journal of Asian Finance, Economics and Business* , 8 (6), 179–188.
<https://doi.org/10.13106/jafeb.2021.vol8.no6.0179>

Indriana, V., & Handayani, N. (2021). Effect of Leverage, Investment Opportunity Set (IOS) and Profitability on Earnings Quality. *Journal of Accounting Science and Research* , 10 (1), 1–18.

Cashmere. (2017). *Introduction to Financial Management.pdf* (Kasmir (ed.); 2nd ed.). Prenada Media.

Kusumawati, H., & Wardhani, SL (2018). Determination Analysis Affecting Earning Quality of Manufacturing Companies Studies on the Indonesia Stock Exchange for the 2012-2016 Period. *Modus* , 30 (1), 17–37.

Laoli, AN, & Herawaty, V. (2019). The Effect of Profitability, Growth, Leverage, Operating Cycle and Prudence on Earnings Quality with Firm Size as a Moderating Variable. In *Proceedings of the National Scholars Seminar (Issue 2000)*.
<https://doi.org/10.25105/semnas.v0i0.5828>

Marpaung, EI (2019). The Influence of Leverage, Liquidity and Company Size as Moderating Variables on Earnings Quality. *Journal of Accounting, Finance, Taxation, and Auditing (JAFTA)* , 1 (1), 1–14. <https://doi.org/10.28932/jafta.v1i1.1524>

Murniati, T., Sastri, IIDA. M., & Rupa, IW (2018). Factors Affecting Profit Quality in Manufacturing Companies Listed on the IDX in 2012-2016. *KRISNA Journal: Collection of Accounting Research* , 10 (1), 89–101.
<https://ejournal.warmadewa.ac.id/index.php/krisna>

Nugroho, V., & Radyasa, Y. (2020). The Effect of Liquidity, Company Size, and Leverage on Profit Quality in Manufacturing Companies. *Journal of Economics and Development* , 10 (2), 80–91. <https://doi.org/10.22373/jep.v10i2.39>

Pardosi, SD, Rafita, Y., Samosir, DM, Purba, FA, & Simangunsong, A. (2019). The Influence of Firm Size, Capital Structure, and Investment Opportunity Set (IOS) on the Profit Quality of Companies Listed on the Indonesia Stock Exchange for the 2014-2017 Period. *Journal of Management Accounting Palapa Nusantara* , 4 (1), 14–21.

Putrianti, F., & Suhartono, S. (2018). The Role of Managerial Ownership as a Mechanism for Improving Profit Quality and Corporate Value. *BALANCE :Journal of Accounting, Auditing and Finance* , 15 (2), 144–161.

Septiyani, G., Rasyid, E., & Tobing, EG (2017). Factors Affecting the Quality of Earnings in Chemical and Basic Industry Companies Listed on the Indonesia Stock Exchange for the 2012-2015 Period. *Fundamental Management Journal* , 2 (1), 70–79.

Setiawan, BR (2017). Effect of Company Size, Profitability, Liquidity and Leverage on Earnings Quality. *Tower of Science* , XI (77), 243–255.

Sugiyono. (2015). *Quantitative Research Methods, Qualitative and R&D* (Sugiyono (ed.); Print to). Alvabet. www.cvalfabet.com

Wati, GP, & Putra, I. wayan. (2017). Effect of Company Size, Leverage, and Good Corporate Governance on Earnings Quality. *E-Journal of Accounting* , 19 , 137–167.

Zulman, M., & Abbas, DS (2019). The Effect of Company Size, Capital Structure, Liquidity, Investment Opportunity Set (IOS), and Profitability on Profit Quality (Food and

The Influence of Investment Opportunity Set (IOS) and Return on Assets on The Quality of Earnings With Company Size as A Moderation Variable

Beverage Companies Listed on the Indonesia Stock Exchange 2013-2017).
COMPETITIVE Journal of Accounting and Finance , 3 (2), 26.
<https://doi.org/10.31000/c.v3i2.1826>