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Behaviour of Individual Investors in Stock Market: How Bias Affect on Decision Making

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ABSTRACT

The capital market has become a popular investment destination, this can be seen in the growth of investment in Indonesia. Investment growth in Indonesia has increased significantly, with the proven increase in the number of Single Investor Identification (SID). Before determining an investment decision, you have to consider a lot. There are many factors that influence investment decision making, including biased psychological factors that can make investors irrational. Therefore, the purpose of this study is to find out the effects of bias, namely self-attribution bias, overconfidence bias, and herding bias on investment decision making. The sample in this study were students of the Faculty of Economics and Business in East Java because students represented potential young investors to contribute in investing in the capital market. Respondents in this study were 200 respondents and data were processed using SPSS Statistics 24. Questionnaires were distributed online and tested for multiple regression. The results of this study are self-attribution bias overconfidence bias, and herding bias have positive effects on investment decision making. The high self-attribution bias can cause investors to make mistakes in interpreting the information obtained regarding the investments made. Then, impact of this overconfidence can affect investors in the way they exaggerate their ability to assess a company's potential as an investment destination, tend to take excessive risks when trading, and underestimate existing risks. Last one is herding, investors advised to be more careful in making decisions because biased herding behavior can have a negative impact on the investment decisions taken.

Keywords : *Self-Attribution Bias*; *Overconfidence Bias*; *Herding Bias*; *Investment Decision Making*

I. INTRODUCTION

The Indonesia Stock Exchange (IDX) recorded an increase of 31.11% from the position at the end of 2020 which reached 3,880,753 SID. In addition to increasing economic growth in Indonesia, the high level of investment will increase people's income so that people's welfare will also increase (Budiarto, 2017). The data shows that the public has a high interest in investing. Especially for youth, students are one of the groups that have the highest interest in investing. Investors listed on the Indonesian capital market are dominated by millennials, especially students. This is inseparable from the efforts made by the IDX as the securities manager by changing the unit of purchase of shares, which was originally a minimum purchase of 1 lot, which was 500 shares, now it is only 100 shares. This effort was made to attract more young investors, especially students.

In making decisions, it is possible that an investor will always involve psychological factors in his investment (Ratnadewi, 2014). The involvement of psychological factors then causes investors when making decisions to tend to be irrational and can lead to errors in predicting and analyzing their investments. This investor irrationality is further explained by behavioral finance theory (Shefrin, 2002).

Behavioral finance will involve emotions, traits, and preferences inherent in humans as intellectual and social beings who interact and underlie decisions when taking action (Wiryaningtyas, 2016). Meanwhile, prospect theory explains that human behavior is considered strange and contradictory in making a decision and is not always rational. Initially, an investor's investment decisions are made based on estimates and investment prospects. However, over time, there are other factors that influence decision-making when investing, namely a person's psychological factors. Even experts show that most of what influences a person when making a decision is the person's psychological factors (Pradhana, 2018).

The existence of psychological factors in making investment decisions causes an investor to behave biasedly. It is through this bias that causes investors to behave irrationally when making investment decisions (Halmawati, 2019). Pompian (2006) explains that bias is divided into two categories, namely cognitive bias and emotional bias. Cognitive bias is a deviation in the process of understanding, processing, and making decisions on information or facts. Overconfidence is one of Cognitive bias. Then emotional bias is a mistake that occurs because it focuses more on feelings and spontaneity than on facts. Examples of this bias that will be discussed are self-attribution bias and herding bias.

Self-attribution bias is an overconfidence bias which is part of emotional bias. Self-attribution bias is very influential when investors have experienced success in the past or when the decisions taken turn out to be profitable (Nofsinger and Hirschey, 2008). It was found that self-attribution bias has a positive influence on investment decisions (Mahina, et al., 2018; Mittal, 2019). Then Cremers and Pareek (2011) also stated that self-attribution bias affects investors when making transactions on the stock exchange by only accepting private information and rejecting public information. The investor believes that his decision will bring the same return as before. Based on previous research and statements, the authors formulate the hypothesis as follows:

H1: Self-Attribution bias has a positive effect on investment decision making.

Overconfidence is a bias that involves too much knowledge, skill and ability of a person to control situations and underestimate existing risks (Valsova, 2016). When it comes to investing, overconfidence seems to have a fairly convoluted immediate application involving projection of the future. Overconfidence is an attribute that influences individual risk perception because investors who are overconfident tend to make sudden decisions that reflect their risk-taking behavior. According to Odean (2018), he shows that overconfidence causes trading volume to increase and ultimately the financial market will be directly affected. Because, traders who are too confident believe that more precise information shows the results in the weight of the information is very significant. Based on previous research and statements, the authors formulate the hypothesis as follows:

H2: Overconfidence bias has a positive effect on investment decision making.

Herding in the financial context occurs when an investor in the financial market imitates the behavior of other investors or a larger group of investors. The classic case of herding in finance is the tendency of individual investors to follow the majority investment decisions instead of carefully and rationally assessing their own decisions independently of the majority opinion (Valsova, 2016). Herding behavior is an irrational action taken by investors not based on their investment decisions based on available information or the company's fundamental value, but based on the actions of other investors or based on noise that occurs in the stock market. According to research by Messis and Zapranis (2019) it is said that the presence of herding is an additional risk factor for investors. So, the volatility measure is positively influenced by the presence of herding behavior. This is supported by the statement of Caparelli et al. (2010) which states that the herding effect is one of the reasons for the occurrence of speculative bubbles. Herding factors can result in better decision making by gathering advantageous information. Based on previous research and statements, the authors formulate the hypothesis as follows:

H3: Herding bias has a positive effect on investment decision making.

These three factors, self-attribution bias, overconfidence bias, and herding bias are biases that can influence an investor's investment decision making. Based on the explanation above, what is interesting for the writer to conduct research is to find out the bias aspects inherent in investors when making decisions under conditions of uncertainty, which are influenced by psychological factors, so the writer is interested in conducting research with the title "The Influence of Self-Attribution Bias, Overconfidence Bias, and Herding Bias on Investment Decision Making.

II. RESEARCH METHOD

This study uses a quantitative approach which explains the effect of the independent variables on the dependent variable. The data source uses primary data which is data obtained directly from the object of research. The object of research is students of the Faculty of Economics and Business in East Java who invest in shares listed on the IDX. This study examines the behavioral aspects of bias that influence investor behavior in making stock investment decisions. By examining the variable aspects of influential behavioral bias, namely self-attribution bias, overconfidence bias and herding bias.

Research Models

A quantitative cross sectional research design has been used in this study. Quantitative study deals with measurable, quantitative properties of any phenomenon. This study is quantitative because data is collected from the population through questionnaire. This study is causal because the four independent variables are the factors (cause) which are affecting the investment performance decision (effect).

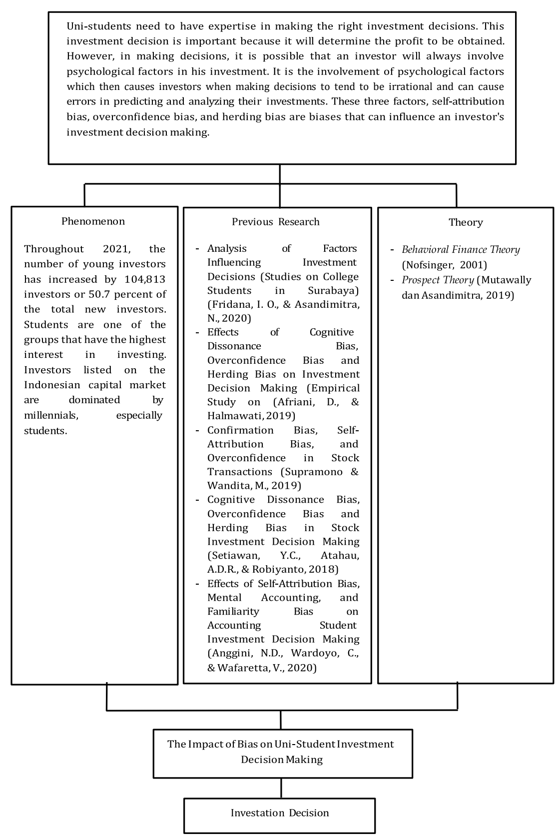

Figure 1. Research Models

Population and Sample

The population in this study totaled 104,813 investors with an age range of 18-25 years for the period December 2022. Using the slovin formula, this study used a minimum of 200 respondents as a sample. The sampling technique used was purposive sampling.

Definition and Measurement of Variables

Based on research problems and hypothesis development, the variables that will be studied in this research are the dependent variable is investment decision making. The independent variables in this research consist of self-attribution bias, overconfidence bias, and herding bias.

Table 1. Operational Definition & Measurement

Variables	Operational Definition	Measurement Indicators
Self-Attribution Bias (X1)	Wrong cognitive decisions result in individuals overdoing it when making investment choices based on their abilities (Mahina, 2018).	1) A well thought out investment plan 2) Confidence in abilities & knowledge 3) Investment losses from external factors 4) Analytical skills 5) Trust in information from relatives
Overconfidence Bias (X2)	Confidence in one's own abilities and knowledge as well as a high level of aggressiveness in buying and selling shares (Shefrin, 2002).	1) Above average investment skills 2) Above average analysis 3) Investment knowledge is better than other people 4) High self-confidence 5) Distrust of other investors' analysis
Herding Bias (X3)	Investment decisions that are based on non-rational behavior regarding the data provided or decisions of an issuer that are based on investors' attitudes and disturbances that may occur on the stock exchange (Subash, 2012).	1) Following other people's investment decisions 2) "Follow the Mass" attitude 3) Follow the behavior of investor groups 4) Rely on other investors' decisions 5) Lack of individual decisions
Investment Decision Making (Y)	Provision for most of the assets used in the capital investment process (Umairoh, 2012).	1) Investment results are in line with targets 2) Have knowledge of investment risks 3) Ability in investment risk analysis 4) Investment performance is in line with target 5) Able to read financial reports well 6) Have investment knowledge to take advantage 7) Investment performance results are satisfactory

Source: *Mahina, 2018; Shefrin, 2002; Subash, 2012; Umairoh, 2012.*

Data Collection Methods

The data collection technique was carried out by distributing questionnaires. The number of respondents was 200 investors. The concepts in this study are the concepts of cognitive dissonance bias, overconfidence bias, herding bias and the concept of decision making. The variable measurement scale used is a Likert scale with 5 points, namely from a scale of 1 (Strongly Disagree) to a scale of 5 (Strongly Agree).

Data Analysis Methods

The analysis technique in this study uses quantitative analysis. The analytical tool used in this research is multiple linear regression analysis. Multiple linear regression is a regression equation using two or more independent variables. Multiple linear regression analysis is used to measure the strength of the relationship between two or more variables, it also shows the direction of the relationship between the dependent variable and the independent variable (Ghozali, 2016).

The multiple linear equation model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Description:

Y	= Investment Decision
A	= Constant coefficient
β1, β2, β3	= Regression coefficients
X1	= Self-Attribution Bias
X2	= Overconfidence Bias
X3	= Herding Bias
e	= Confounding variable (error)

This multiple linear test is used to predict the probability of the influence of each investment decision variable. The variables in this study are self-attribution bias, overconfidence bias, and herding bias.

III. RESULTS AND DISCUSSION

Data Description

The number of samples used as the subject of this study amounted to 200 respondents according to calculations with the slovin formula. However, after sorting the questionnaire data according to the research criteria, the number of samples was reduced to 171 respondents. Furthermore, the questionnaire data were outliers using SPSS because there were extreme data so that the final total number of samples for testing using IBM SPSS 24 was 124 respondents.

Validity and Reliability Test

The data has fulfilled the validity and reliability tests. The validity test using the product moment correlation table from Pearson shows that overall the statement items used in the questionnaire are valid with a significance level of 0.05 and r count > r count (0.361). Based on the reliability test, the Cronbach alpha coefficient value of the four variables was > 0.60, so that the instrument was declared reliable.

Classic Assumption Test

The normality test was carried out by the Kolmogorov-Smirnov test using SPSS 24. Based on Table 1, the significance value is 0.193 > 0.05 which means that the data meets the normality assumption. Based on Table 2, the VIF values for each independent variable, namely self-attribution bias, overconfidence bias, and herding bias < 10 and the tolerance value is between 0.10 and 1. These results indicate that there is no multicollinearity between the independent variables in regression models.

Table 2. Normality Test

		Unstandardized Residual
Asymp. Sig (2-tailed)	Sig.	0,193

Source: *Processed by author, 2023.*

Table 3. Multicolinerarity Test

Variable	Collinearity Tolerance	VIF	Result
Self-Attribution Bias	0,710	1, 409	No multicollinearity
Overconfidence Bias	0,621	1,610	No multicollinearity
Herding Bias	0,834	1,199	No multicollinearity

Source: *Processed by author, 2023.*

Table 4. Heteroscedasticity Test

Variable	t_{count}	Sig	Result
Self-Attribution Bias	-1,298	0,197	No Heteroscedasticity
Overconfidence Bias	2,871	0,005	No Heteroscedasticity
Herding Bias	1,338	0,183	No Heteroscedasticity

Source: *Processed by author, 2023.*

Table 3 shows that the variable self-attribution bias has a significance value of 0.005, overconfidence bias of 0.005, and herding bias of 0.183, all of which have a significance value of more than 0.05. These results indicate no heteroscedasticity. Thus, it can be concluded that overall the regression model in this study has fulfilled the classical assumption test.

Hypothesis Test

In order to find the effect of self-attribution bias (X1), overconfidence bias (X2), herding bias (X3) on investment decision making (Y) using statistical analysis, namely the multiple regression analysis model. From the results of calculations using the SPSS program. The results of the regression analysis can be seen in the following table.

Table 5. Multiple Linier Regression

Variable	Unstandarized Beta	t_{count}	Sig	Result
Self-Attribution Bias	0,475	3,028	0,003	Positive
Overconfidence Bias	0,573	6,049	0,000	Positive
Herding Bias	0,369	3,817	0,000	Positive

Source: *Processed by author, 2023.*

The results of the multiple regression equation above provide an understanding that progress in self-attribution bias (X1), overconfidence bias (X2), herding bias (X3) has a positive effect on investment decision making (Y).

The value of the constant (a) gives a positive value of 2.470, meaning that if the variable self-attribution bias, overconfidence bias, and herding bias are considered constant = 0, then the level of investment decision making is 2.470.

The self-attribution bias variable is 0.475 and gets a significant value < 0.05, positive sign, this indicates that if the self-attribution bias increases by 1% and other variables are constant, investment decision making will increase by 0.475.

The variable overconfidence bias is 0.573 and the result is a significant value <0.05, marked positive. This indicates that if the self-overconfidence bias increases by 1% and other variables are constant, investment decision making will increase by 0.573.

The herding bias variable is 0.369 and gets a significant value <0.05, which is positive, this indicates that if the herding bias increases by 1% and the other variables are constant, investment decision making will increase by 0.369.

Based on the results of the regression equation above, it can be concluded that the investment decision making variable (Y) is followed by self-attribution bias (X1), overconfidence bias (X2), and herding bias (X3). The dominant factor influencing investment decision making is overconfidence bias as indicated by the largest regression coefficient value compared to the overconfidence bias variable, which is equal to 0.573.

Table 6. Partial Test (T-Test)

Variable	t_{count}	Sig	Result
Self-Attribution Bias	3,028	0,003	Significant
Overconfidence Bias	6,049	0,000	Significant
Herding Bias	3,817	0,000	Significant

Source: *Processed by author, 2023.*

If the sig. < 0.05 or t count > t table, then the independent variable is stated to have a positive effect on the dependent variable. table in this study is t(α/2;n-k-1) = t(0.025;120) = 1.980. In accordance with the table above, the t-test results calculated for each variable are:

The significant value of the self-attribution bias variable (X1) is 0.003 <0.05 and the count value is 3.028 > table of 1.980 meaning that there is an effect of self-attribution bias (X1) on investment decision making (Y).

The significant value of the overconfidence bias variable (X2) is 0.000 <0.05 and the count is 6.049 > table is 1.980 meaning that there is an influence of overconfidence bias (X2) on investment decision making (Y).

The significant value of the herding bias variable (X3) is 0.000 <0.05 and the count value is 3.028 > table of 1.980 meaning that there is an effect of herding bias (X3) on investment decision making (Y).

Discussion

Effect of Self-Attribution Bias on Investment Decision Making

From the test results, the variable self-attribution bias has an influence on investment decision making, the significant value of the variable Self-Attribution Bias (X1) is 0.001 ≥ 0.05 and β1 of 0.475 which indicates that Ha1 has a positive effect on the perception of profit sharing on investment decision making proven correct and accepted.

That is, the higher the self-attribution bias in an investor, the higher the investment decisions taken. The high self-attribution bias can cause investors to make mistakes in interpreting the information obtained regarding the investments made. In this study, students who were respondents believed that the benefits they got came from good analytical skills related to stock price fluctuations. They feel able to predict high returns with low risk.

Effect of Overconfidence Bias on Investment Decision Making

This study shows that there is an influence of overconfidence bias on investment decision making. The significant value of the Overconfidence Bias variable (X2) is with a value of 0.001 ≥ 0.05 and β1 of 0.573 which indicates that Ha2 has a positive influence on the perception of profit sharing on investment decision making which is proven to be correct and accepted.

This research is linear with the prospect theory which states that human behaviour is not always rational and can be contradictory when making decisions. Overconfidence bias refers to an unwarranted belief in one's reasoning, judgment, and cognitive abilities. The impact of this overconfidence can affect investors in the way they exaggerate their ability to assess a company's potential as an investment destination, tend to take excessive risks when trading, and underestimate existing risks.

Effect of Herding Bias on Investment Decision Making

From the test results, the herding bias variable has an influence on investment decision making, the significant value of the herding bias variable (X3) is with a value of 0.001 $\geq$ 0.05 and $\beta 1$ of 0.369 indicating that Ha3 has a positive influence on the perception of profit sharing on investment decision making proven correct and accepted.

Herding refers to the change in investor behavior from previously rational to irrational through imitating the decisions of others, when they have to make decisions for themselves. Herding happens because investors feel they lack knowledge compared to other investors. In the context of the abundance of information out there, investors face difficulties in evaluating that information. Finally, they choose to take shortcuts by imitating the decisions of other investors or institutions that are deemed capable of processing this information.

IV. CONCLUSION

Based on the results of research conducted by researchers on the effect of self-attribution bias, overconfidence bias, and herding bias on the investment decision making of students at the Faculty of Economics and Business in East Java, the following conclusions can be drawn.

a. Self-Attribution Bias (X1) has a positive effect on investment decision making. That is, the higher the self-attribution bias in an investor, the higher the investment decisions taken.
b. Overconfidence Bias (X2) has a positive effect on investment decision making. This means that respondents have a high level of self-confidence, so they tend to be brave in making investment decisions.
c. Herding Bias (X3) has a positive effect on investment decision making. This happens because investors feel they lack knowledge compared to other investors. Finally, they choose to take shortcuts by imitating the decisions of other investors or institutions that are deemed capable of processing this information.

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Analysis of the Influence of Financial Ratios on the Dividend Payout Ratio Calculation

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ABSTRACT

In 2020, Indonesia is in a state of emergency for Covid-19. This causes a negative impact, especially for the company. The profit earned is getting smaller so that it affects the rate of return from the company, one of which is dividends. In carrying out its investment activities, shareholders hope to get returns in the form of cash dividends that can be paid annually. The purpose of this study was to determine the relationship between the effect of free cash flow, profitability, leverage, and sales growth on the dividend payout ratio amid Covid-19. This study used a quantitative method with a purposive sampling technique for sample selection. The sample in this study is an LQ45 company based on certain criteria. Test the hypothesis using multiple linear analysis test. The results of the study show that the independent variables simultaneously have a significant effect on the dividend payout ratio. Meanwhile, partially, the results show that free cash flow and leverage have no effect on the dividend payout ratio. profitability and sales growth have a significant effect on the dividend payout ratio.

Keywords : *dividend payout ratio, free cash flow, profitabilitas, leverage, and sales growth*

I. INTRODUCTION

After WHO announced the Covid-19 Virus to the whole world, the transmission accelerated. Every day, more and more people are affected, including Indonesia. The company's operational activities were disrupted due to the impact of Covid-19. The corporate model must be reorganized and innovated by management. This is done so that the business can survive these conditions and be able to boost its income again. As many as 66.09% of business actors showed a continuous decline in income during the third quarter of 2020, according to evidence from a review conducted by BPS regarding the impact of Covid-19 on business actors, while 10.43% of entities reported income. increase. Considering the scale of the business, while Large and Medium Enterprises experienced a decline in income of 57.29%, (UMK) experienced a decline in income of 67.77%.

Profit is one of the company's most vital sources of funding. This is in line with Suwardjono's statement that profit is seen as a reward for the company's efforts to provide goods and services (2008: 464). In general, businesses often have one of two options when deciding how to use revenue. Keep profits in the form of retained earnings and then distribute them to investors in the form of cash dividends or use them to cover business operating costs. Investors, meanwhile, often favor capital gains on tax-related matters. This is because capital gains tax is lower than dividend tax (Darmayanti, 2016).

Samsul (2006) claims that capital gains are income expressed as a proportion of the initially invested capital, where profits are referred to as capital gains and losses are referred to as capital losses. Dividends, on the other hand, are payments of corporate profits to shareholders (Widoadmojo, 2004). According to Warren et al. (2005: 425), companies use dividends as a way to transfer their profits to their shareholders. One of the companies that did not pay dividends during the Covid-19 pandemic were British Pretoleum and PT Wijaya Karya (WIKA). WIKA is one of the companies included in the LQ45 index. The LQ45 index is part of the headline classification based on liquidity. The following table describes the LQ45 corporate status.

Based on the IDX Stock Index Handbook V1.2 published on April 5 2021, stocks with an LQ45 index are active shares and have the number two liquidity level on the IDX. Investors can evaluate the company's dividend policy by comparing it with the company's LQ45 as a result. Apart from the JCI, this kind of stock index is another option. In addition, information regarding the rate of return or income from investment for

1 to 5 years. LQ45 companies are in second position, but the rate of return within 5 years is smaller when compared to IDX30 companies which are in a lower position than LQ45s, so this is one of the reasons for researchers to conduct research on the LQ45 stock index.

LQ45 stock is dynamic due to its high level of liquidity, fluctuations in market capital, and many companies entering and leaving alternately. The LQ45 index provides an objective and reliable financial analysis tool, making it a useful addition to the JCI for managers, shareholders and other capital market users to analyze changes in the prices of actively traded stocks (Rachmawati, 2018). The LQ45 index uses 45 different stocks each time it is updated, depending on the liquidity of stock trading, which occurs twice a year, or every February and August. As a result, investors followed and fluctuated closely with the LQ45 share price. To reduce uncertainty in their investment operations, shareholders want to receive more cash dividend payments (Sunarto & Kartika, 2003). The dividend payout ratio is the proportion of income that will be distributed to investors in the form of dividends.

DPR is one of the formulas for knowing dividend payments. DPR is part of the entity's net profit given to shareholders as dividends (Sudana, 2015: 167). Given the various variables that may affect dividend distribution, it is difficult to determine which aspects have a significant impact on company policy. According to Asril (2019), Utama & Gayatri (2018), Andre (2020), Kelvira, et al (2020) and Aril (2019), free cash flow has no effect on the dividend payout ratio. This is consistent with the agency theory where if a company has a large free cash flow, the company's management tends to make large-scale investments rather than distributing the free cash flow to shareholders as dividends, because distributing dividends is seen as an obstacle to the progress of the company's growth. This is because, to avoid overinvestment (free cash flow problem), managers will distribute dividends in high amounts. Meanwhile, according to Kasnita, et al. (2019), profitability has a negative and insignificant impact on changes in dividends. This proves that the dividend payout policy does not depend on profitability. Then regarding profitability, Ratnasari, et al. (2019) argues that profitability has a significant effect in a positive direction on dividend policy. This shows that the total obtained by shareholders will increase in direct proportion to the company's profitability. The impact of leverage on dividend policy has also been studied by other researchers. Kasnita, et al. (2019) found that the size of DER leverage has a negative and substantial impact. Writing by Zara (2018), which shows if the leverage ratio calculates how a company is supported by debt, also gives similar results in this writing. If large leverage will increase investor surplus, shareholders want it. This is inversely proportional to the findings of Ratnasari, et al. (2019) which shows that leverage has a beneficial and negligible impact on dividend policy. According to Benedicta (2019), sales growth has no effect on the dividend payout ratio. This is because the growth in the level of sales does not always indicate that the company's profits also increase.

According to the agency theory in this study, the principal-investor or shareholder holds the company's management accountable for all operational and non-operational activities. Investors trust management to convey accurate information to investors about the rate of return on investment (dividends).

In this study, signal theory is used to explain how company management informs investors about the company's success. Dividends can be used by managers to share information about business success. In these circumstances, dividends can either be seen as a sign that the entity has good future opportunities, or vice versa.

The dividend payout ratio is the percentage of profit on investment (Sutoyo et al., 2011). According to Imran (2011) & Nuraeni (2013) dividend policy is very useful for several factors, including the fact that dividends are very important for capital structure and that dividends send financial signals to outsiders about stability and opportunities for business progress. Sudana (2011) states that dividends are a decision of management in managing company expenses, especially regarding the company's internal expenses.

Nuraeni (2013) management attention is needed because the company's dividend policy determines the amount of dividends to be paid. When choosing how much to pay to shareholders, managers need to pay attention to a number of important criteria based on company policy (Khan and Ashraf, 2014). According to Nuraeni (2013), if the dividend payout ratio is large, the dividends paid will be even greater. However, on the other hand the company's retained earnings will decrease and worsen internal finances. However, if the dividend payout ratio falls, investors will suffer while the internal finances of the business will improve.

Therefore, researchers are interested in research using free cash flow, profitability, leverage, and sales growth. Zulianti (2010) emphasized that LQ45 companies are known to have high liquidity. In addition, companies listed on LQ45 performed well financially so the authors decided to focus their analysis on the scope of LQ45 based on the explanation above. Researchers will later develop the results of previous research, namely Kasnita, et al (2019). To find out the variables that might affect dividend policy, this paper will also include other variables. In connection with this, the authors tested the hypothesis entitled "**Analysis of the Influence of**

Financial Ratios on the Dividend Payout Ratio Calculation".

The purpose of this research is to influence the significant effect of free cash flow, profitability, leverage, and sales growth on the dividend payout ratio partially and simultaneously.

II. RESEARCH METHOD

This type of research is a quantitative method, because the data used is in the form of numbers. The numbers obtained are used in data analysis. This study consists of 5 (three) variables, namely Dividend Payout Ratio (DPR) as the dependent variable, while Free Cash Flow, Profitability, Leverage, and Sales Growth as independent variables. This study uses secondary data, namely the annual financial reports of each company listed on the LQ45 index for 2020 and 2021.

The data collection method is to use documentation techniques by taking data on the annual financial reports of LQ45 companies listed on the Indonesia Stock Exchange (2019 to 2021).

In determining the sample for this study, a purposive sample was used, namely the sample was selected based on the research objectives. The criteria used in selecting the sample in this study were as follows: (1) Companies listed on the IDX. (2) LQ45 companies listed on the IDX and a total of 45 companies. (3) LQ45 companies which routinely issue annual reports in 2020 and 2021 and found 38 companies. (4) LQ45 companies that always pay dividends in 2019-2021 by reviewing their Notes to Financial Statements and found 28 companies.

The hypothesis in this research will be tested using multiple linear regression analysis. The data techniques used include: (1) Classical Assumption Test, which consists of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation. (2) Partial Significance Test (t test). (3) Simultaneous Significance Test (f test), and (4) Coefficient of Determination (R^2).

According to Sugiarto (2002), the coefficient shows the percentage of influence of all independent variables on the dependent variable. The ability of the independent variable to explain the dependent variable depends on the coefficient of determination. By looking at the R Square value from the Model Summary output table. The R Square value is obtained from R2. The following is the R Square category to determine the strength of the independent variable's influence on the dependent variable.

- Strong if R Square > 0.67;
- Moderate if R Square > 0.33 but < 0.67; and
- Weak if R Square > 0.19 but < 0.33.

III. RESULTS AND DISCUSSION

The results of the normality test using the Kolmogorov Smirnov test show a significance at 0.200 which indicates that the value is greater than 0.05, so it can be concluded that the residual data is normally distributed.

The results of the autocorrelation test showed that the Durbin-Watson value was 2.187. Based on k (4) and N (56) with a significance of 5%, then du (1.724) < Durbin-Watson (2.154) < 4-du (2.276) means that there is no autocorrelation symptom.

The results of the multicollinearity test show that (1) Free Cash Flow has a VIF value of 1.097 <10 and a tolerance value of 0.911 > 0.10 means that the data has no symptoms of multicollinearity. (2) Profitability with a VIF value of 1.257 <10 and a tolerance value of 0.795 > 0.10 which means that the data has no symptoms of multicollinearity. (3) Leverage with a VIF value of 0.920 <10 and a tolerance value of 1.087 > 0.10 which means that there are no symptoms of multicollinearity. (4) Sales Growth with a VIF value of 1.091 <10 and a tolerance value of 0.917 > 0.10 which means that there are no symptoms of multicollinearity.

While the results of the heteroscedasticity test show that (1) Free Cash Flow with Sig. 0.757 > 0.05 means that there is no heteroscedasticity. (2) Profitability with Sig. 0.514 > 0.05 means that there is no heteroscedasticity. (3) Leverage with Sig. 0.321 > 0.05 means that there is no heteroscedasticity. (4) Sales Growth with Sig. 0.479 > 0.05 means that there is no heteroscedasticity.

Partial Significance Test (t test)

Hypothesis 1 : Significant effect of free cash flow on the dividend payout ratio

From the results of hypothesis testing 1, a significance value of 0.053 is obtained, which means that the figure is > 0.05 so that the result is that free cash flow does not have a significant effect on the dividend payout ratio. These results support what was done by Putri (2016), Utama & Gayatri (2018), Andre (2020), Kelvira, et al (2020), and Aril (2019), the research results prove that FCF has no effect on the DPR and negative results are obtained against the DPR so that FCF conditions do not affect the amount of dividends. The company with the highest free cash flow is PT Unilever Indonesia, Tbk. Meanwhile, companies with low free cash flow are PT Wijaya Karya (Persero) Tbk. Even so, companies still pay dividends even though their FCF is low. Supports the Agency Theory that if a company has high free cash flow, managers tend to invest excessively instead of paying dividends to shareholders. In principle, FCF should be paid to shareholders. This statement is similar to signaling theory which shows that dividend policy reflects management's expectations regarding the company's free cash flow and what will happen in the market in response to dividend payment announcements. There are negative and positive signals that are likely to be received by shareholders, meaning that not all trading signals are fully collected by the market. In other words, shareholders are still uncertain due to lack of information in the market.

Hypothesis 2 : Significant influence between profitability on the dividend payout ratio.

The results of hypothesis testing 2, obtained a Sig. of 0.002 <0.05 so the result is that profitability as measured by ROA has a significant effect on the DPR. The company with the highest profitability is PT Unilever Indonesia, Tbk. Meanwhile, companies with low profitability are PT Wijaya Karya (Persero) Tbk. With high profits, PT Unilever Indonesia Tbk can pay higher dividends when compared to other companies, and the situation is the other way around with WIKA. In accordance with research conducted by Ni Ketut (2019), Zara (2018), Arsyad (2021), Suriani (2018), and Erna (2017). The results show that the higher the surplus obtained, the dividends paid also increase. Supports agency theory, that is, everything that shareholders do before investing in a company reflects the profits generated by the company's assets. This is intended to attract the interest of shareholders as well as improve company performance. Managers will be encouraged to take advantage of ROA by conducting earnings performance management. The results of agency theory can also be linked to signaling theory which explains that an increase in ROA indicates a good achievement and will be received by the public as a positive signal because this will provide positive input for shareholders. Therefore, the company will generate a large surplus if the ROA is high. This profit is used to pay dividends so that investors are interested in investing in the company.

Hypothesis 3 : Significant influence between leverage on the dividend payout ratio.

The results of hypothesis testing 3, get Sig. 0.437 > 0.05 so the result is leverage which in this study is represented by DER does not have a significant effect on the dividend payout ratio. The company with the highest leverage is PT Bank Negara Indonesia (Persero), Tbk. Meanwhile, companies with low free cash flow are PT Semen Indonesia (Persero) Tbk. Even so, companies still pay dividends even though their debt is high. This is the same as research conducted by Ni Ketut (2019), Kasnita (2019), Zara (2018), and Suriani (2018). The results of the study conclude that the company's ability to pay dividends is not affected by the amount of debt owned by the company. Regardless of the debt owned by the company, dividends must still be paid according to the agreement. If this is related to the agency theory, it states that liabilities are used to finance the company's operations. The higher the trade payables, the greater the risk borne by shareholders, thus demanding a high level of profit so that the company is not threatened with liquidation. This is related to the signaling theory, namely information on an increase in DER will have an impact on the company as a bad signal because the company must continue to pay its debts which have become the company's obligations to third parties. Therefore, if the DER is high or low, it will not affect dividend payments. The company must continue to pay dividends even though the DER level is high and vice versa because dividends can be interpreted as the company's debt to shareholders so they must be paid as well. However, the company is still expected to pay dividends because this affects the company's liquidity level.

Hypothesis 4 : Significant influence between sales growth on the dividend payout ratio.

Hypothesis test results 4, Sig. 0.000 <0.05 so the result is sales growth has a significant effect on the DPR. The company with the highest sales growth is PT Japfa Comfeed Indonesia, Tbk. Meanwhile, companies with low sales growth are PT Wijaya Karya (Persero) Tbk. In this case when compared, the dividends distributed by PT Japfa Comfeed Indonesia, Tbk. Bigger when compared to PT Wijaya Karya Indonesia, Tbk because from a sales growth perspective, Japfa's company is higher. This supports research by Siti Nurlatifah (2021), Mufidah (2018), and Maidina (2018) that sales growth has a significant effect on the DPR. This is because the company's profit will be high if the sales are also high. If profits increase, the dividends paid by the company can also be distributed regularly and high. If this is related to the agency theory that revenue growth increases every year, the company has good prospects. If the level of sales increases, it can reflect that the business is growing rapidly so that the company is expected to be able to provide maximum return on investment by shareholders. This is in line with signaling theory, good sales growth information will generate positive signals to investors. This information is used by management to convey good news to shareholders so that they can benefit from stock investment, namely dividends. Increased sales growth will enable the company to get big profits as well so that the company can share its profits to pay dividends. Companies with high growth will attract investors to invest in these companies. This is consistent with the results of testing the hypothesis on the rate of return expressed by ROA.

Simultaneous Influence (Test F)

Hypothesis 5 is accepted because variable X (free cash flow, profitability, leverage, sales growth) has a simultaneous effect on variable Y (DPR). This is evidenced by the resulting significance value of 0.000 > 0.05. In terms of the coefficient of determination, this simultaneous effect is in a moderate position because the value obtained at Adjusted R Square is 0.346 meaning that free cash flow, profitability, leverage, and sales growth to DPR is 34.6% and is in the moderate category because > 0.33 but < of 0.67.

Hypothesis 5 : Significant influence of free cash flow, profitability, leverage, and sales growth simultaneously on the dividend payout ratio.

Sig's research results. The Independent Variable has a simultaneous effect on Y of 0.000. Then to find out how much strength is seen from the results of the R-Square coefficient of determination. The results of the R-Square analysis show that the effect of the independent variable (X) on the dependent variable (Y) is in the moderate category. If this is related to the agency theory that shareholders hope to get large profits because they have invested in a company. In investing, investors see how the company carries out its operational activities. If operational activities increase, it is highly likely that the company will be able to distribute dividends to investors. This is also done by company managers by calculating the ratio for dividend policy and to maintain investor confidence in the investment made into the company. This result is in line with signaling theory, the four independent variables are considered to be able to provide information to be used as a basis for dividends. Shareholders can also calculate dividends to be received based on the amount of FCF, based on debts that must be paid by the company, based on profits earned by the company, and based on total net sales generated by the company within one year so that the company's management can provide appropriate dividends based on consideration of the four variables above.

IV. CONCLUSION

Based on the results and discussion that has been presented in chapter IV, the conclusion of the research results is that there are two factors that can be used by companies as a consideration for paying dividends to shareholders, namely among others profitability and sales growth. This is because the two variables are related to the profit of a company. If the company's profit is high, it is likely that the higher the dividends distributed to shareholders.

Then, it is also found that variables that do not affect the amount of dividend distribution to a company, namely free cash flow and leverage. This is because companies prefer to invest the remaining money they have rather than saving the money or paying it to shareholders because the higher the free cash flow in a company, the less good the impact will be on the company. Meanwhile, in terms of leverage, this does not affect dividend payments because of the similarity in treatment between debts to third parties, in this case dividends can also be referred to as debts to third parties that must be paid by the company to shareholders.

However, from the results of the coefficient of determination, this shows that the four variables simultaneously influence the dividend with moderate strength. Therefore, the independent variables in this study must still be used to calculate the amount of dividends based on the four variables that have been studied.

In this study, there are limitations in researchers, the first is that research has limitations in a span of 2 years so that researchers hope that future researchers can increase the time span of their research. Second, researchers still use 4 independent variables, it is hoped for further research. Third, this research still has limitations in the research object which only leads to LQ45 companies.

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Green Accounting Analysis To Firm Value : Study On Metal And Mineral Companies

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ABSTRACT

Over time, economy continue to expand swiftly and directly proportional to environmental issues. This study aims to find out how green accounting affects to firm value with quantitative approach. In this study, independent variables is green accounting proxied by environmental costs and environmental performance. Environmental cost measured by total environmental cost incurred divided by total operational expenses of company, whereas environmental performance measured by GRI 300 series. Dependent variable is firm value proxied by Tobin's Q. This research was carried out between 2017 - 2021, with secondary data taken from sustainability reports and company's annual reports. Population in this study was metal and mineral industry (B14) firms listed in IDX of 29 companies with purposive sampling methods. The result is, green accounting has no influence on firms value. This is due to green accounting does'nt have direct influence to firm value, but can provide greater long-term benefits in terms of operational efficiency, business sustainability, and reduced environmental risks.

Keywords : Green Accounting; Environmental Costs; Environmental Performance; Firm Value; Tobin's Q.

I. INTRODUCTION

Over time, business and economy in Indonesia have experienced rapid growth across various industrial sectors. By the end of 2022, there were 820 companies lis ted on the Indonesia Stock Exchange (IDX), marking a 7% increase compared to 2021 (Binekasri, 2022). This growth is aligns with the escalating surrounding environmental concerns (Lestari et al., 2021). Globally, environmental issues are being discussed more intensively in relation to global climate change caused by carbon production and emissions (O'Doherty, 2022). Business activities that rely on natural resources are highly vulnerable to environmental sustainability (Noy & Yonson, 2018).

In 2018, the community of Tole held demonstrations in protest against nickel mining conducted by PT Vale Indonesia in South Sulawesi. These demonstrations stemmed by detrimental effects inflicted upon ecosystem of Lake Mahalona, which suffered reduction in size amounting to 151 hectares (Wicaksono, 2022). In October 2022, a leakage occurred in the sediment pond of PT Cita Mineral Investindo, which conducts bauxite mining in West Kalimantan. This incident resulted in the river water becoming turbid and damaging the environment in several surrounding villages. (Mulyadi, 2022). The research conducted by Syarifuddin (2022) on the impact of the nickel mining industry in Morowali Regency provides substantial support for the earlier phenomenon related to nickel mining that has led to sedimentation issues. The phenomenon indicates that mining companies whose operational activities involve exploration of natural resources have complex impacts on the environment, such as deforestation, soil erosion, and water pollution (KLHK, 2020).

Environmental issues have become a serious concern and are feared to have an impact on the legitimacy and decline on firm value (Wu & Shen, 2010). Legitimacy theory, proposed by Dowling and Pfeffer (1975), states that company's operational activities should be based on principles and standards that are applicable to society and environment in which company operates (Puspitaningrum & Indriani, 2021). Firm value is value of company' s corresponds to degree of achievement it attains in effectively utilizing its resources, as evaluated by its investors (Soedjatmiko et al., 2021).

Therefore, concept of green accounting emerges as a form of accountability in improving efficiency of environmental management from perspective of costs and benefits (Bartelmus, 2013). Ningsih & Rachmawati (2017) define green accounting as a type of accounting that encompasses reporting of indirect costs and benefits related to economic activities, including environmental implications and impacts of business decisions and corporate plans. According to Magablih (2017) green accounting involves disclosure of environmental costs used to measure environmental pollution and expenses incurred for social environmental activities Opinion of Riyadh et al. (2020) which is aligned with previous opinion, states that green accounting encompasses several aspects, including evaluating potential environmental liabilities and analyzing costs in various environmental protection measures. In addition to including environmental costs, green accounting also encompasses corporate environmental performance. Environmental costs incurred are used to finance environmental performance, thus enabling the establishment of effective environmental impact management (Rounaghi, 2019).

Green accounting is expected to enhance firm's value by environmental costs incurred to fund environmental performance. Environmental costs refer to expenses incurred in addressing damages and contamination resulting from company's operations (Meiyana & Aisyah, 2019). Environmental performance is achievement of company regarding its interactions with environment through its activities in producing goods and services (Burhany & Nurniah, 2013).

Research conducted by Fauzi (2022) found that environmental performance has positive influence on firm value. Study by Jo et al. (2016) discovered that environmental costs also have a positive influence on firm value.

Supported by legitimacy theory and previous research findings, hypothesis in this study is green accounting proxied by environmental costs and environmental performance, has positive influence on firm value.

Due to differences in measurement approaches and variations in research subjects, previous studies have yielded diverse results. Therefore, research on impact of green accounting to firm value still needed, particularly after transition of classification system from BEI to IDX Industrial Classification (IDX-IC). Furthermore, according to KLHK (2020) mining sector has more complex impact on environment compared to other sectors.

II. RESEARCH METHOD

This study employs quantitative approach utilizing secondary data. Data used in this study are sourced from sustainability reports and annual reports of metal and mineral industry companies listed on the IDX during research period from 2017 to 2021. Green Accounting is measured using the Environmental Cost (X1) proxy which comes from the disclosure of the company's environmental costs divided by total operating costs, and the second proxy is Environmental Performance (X2) which is measured using the GRI 300 Series with the dummy method with a total of 32 Environmental Performance Index. Population for this study consists of 29 metal and mineral industry companies (B14) listed on the IDX during the same research period, resulting in total population size of 145 (number of companies multiplied by research period). Sampling method used in this study is purposive sampling, to ensuring that obtained samples meet the specified criteria (Sugiyono, 85:2013). The number of samples that fulfill the criteria in this study is as follows:

Table 1. Sample criteria and amount

No	Sample Criteria	Amount
1.	Have annual reports and/or sustainability reports during 2017-2021.	131
2.	Doesn't include environmental costs in their annual reports or sustainability reports during 2017-2021.	(72)
Total samples fulfil criteria		**59**
Data Outlier		**(7)**
Data used in this study		**52**

Here are the measurements used in this study:

Table 2. Variable measurement

Dependent	Sample Criteria	Measurement
Green Accounting (X)	EC (X_1)	$\frac{Total\ environmental\ costs}{Total\ company\ operating\ costs}$
	EP (X_2)	$\frac{Company\ EPI\ score}{Total\ EPI\ score}$
Firm Value (Y)	Tobin's Q	$\frac{Market\ Value}{Total\ Assets}$

III. RESULTS AND DISCUSSION

Descriptive statistic

Descriptive statistical analysis values are presented in the table below:

Table 3 Descriptive Statistic

	N	Min	Max	Mean	Std. Deviation
X1	52	,0000	,6550	,049152	,1114194
X2	52	,090	,810	,46236	,187387
Y	52	,019	2,112	,68292	,517425

Source : SPSS Output

Analysis Prerequisite Test

Duli (2019:114) explains that before conducting a multiple linear regression analysis based on OLS (ordinary least squares), it is necessary to fulfill the requirements of classical assumption tests. This study passed classical assumption tests, including normality test using Kolmogorov-Smirnov test with value of $0.132 \geq 0.05$, multicollinearity test with VIF (Variance Inflation Factor) value of $1.014 \leq 10$ and tolerance value of $0.986 \geq 0.1$, autocorrelation test using runs test with value of $0.05 \geq 0.05$, and heteroscedasticity test using scatterplot as shown in the figure below:

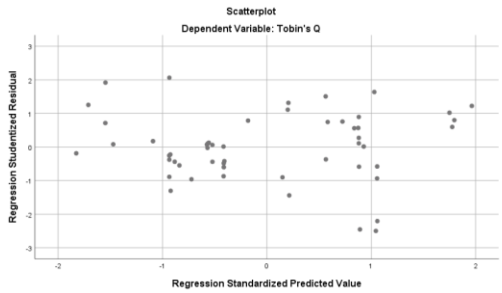

Figure 1 Scatterplot test result

Source : SPSS Output

Hypothesis Test Results

1. **Determination coefficient test**

Table 4 Determination coefficient test

Dependent	R	R Square
Firm Value (Tobin's Q)	0,136	0,018

Source : SPSS Output

Based on the results of coefficient determination test above, it can be seen that R Square results is 0,018 which contains environmental cost variables (X_1) and environmental performance (X_2) can explain firm value proxy by Tobin's Q by 1.8% while the remaining 98.2% is explained by other independent variables outside this research.

2. **Simultan test (F test)**

Table 5 Simultan test result

Dependent	F	Sig
Firm Value (Tobin's Q)	0,459	0,634

Source : SPSS Output

Based on the results of F test above, it shows that result of F value is 0.459 and significance value is 0.634. These results indicate that F value of 0.459 < 3.18 and significance value of 0.634 > 0.05, so it can be concluded that green accounting which contains environmental cost (X_1) and environmental performance (X_2) simultaneously and significantly has no effect on firm value. The simultaneous test results in this study show that the two variables that measure green accounting tested together not have significant effect on firm value. Therefore, there is no need to conduct a partial test for each independent variable separately.

Discussion

In this study, green accounting is measured using environmental cost variable (X_1) and environmental performance variables (X_2). Hypothesis of this study is green accounting proxied by environmental costs and environmental performance has positive impact on firm value. Based on the results of this study, it was found that green accounting in the metal and mineral industry has no effect on firm value, so hypothesis in this study is rejected.

In this study, green accounting is proxied by environmental cost (X_1) and environmental performance (X_2). Environmental costs are measured using the ratio of total environmental costs divided by total operating costs. Environmental costs are costs incurred in overcoming damage and pollution arising from company's operations (Meiyana & Aisyah, 2019). Operating costs include all costs incurred by company in carrying out operational activities. The ratio of environmental costs to operating costs provides an overview of the extent to which company allocates financial resources to environment compared to company's core operational activities. Based on table 3 descriptive statistics, it communicates that average ratio of environmental costs divided by operating costs is 0.049152, which means about 2% of operating costs are spent on environmental costs.

Environmental performance variable is measured by environmental performance score using GRI 300 index. Rahayudi & Apriwandi (2023) define environmental performance as results achieved by environmental management system in controlling environmental aspects. This research use GRI 300 index in measuring environmental performance because GRI 300 2016 standard discusses specifics regarding the reporting of sustainable environmental aspects and adoption of GRI as a sustainability index is regulated in POJK No.51/POJK.03/2017 concerning the implementation of sustainable finance for financial service institutions, issuers, and public companies. Based on table 3 descriptive statistics, it communicates that the average environmental performance reporting score is 0.46236 which means average of metal and mineral companies (B14) report contains 15 environmental performance components in sustainability report using GRI 300.

The lack of influence of green accounting on firm value in this study is due to measurement of firm value proxied by Tobin's q, which is relative measure between market value and book value of the company tending to focus more on financial variables and financial performance. This study considers impact of green accounting conducted by companies in terms of environmental costs and environmental performance cannot be directly observed to be related to financial performance, which leads to the lack of a visible relationship between green accounting and firm value. The lack of influence of green accounting on firm value in this study can also be attributed to industry-specific factors related to natural resources, where entities are required to perform environmental management activities such as post-operational reclamation, energy efficiency, supplier selection, and attention to biodiversity. These responsibilities must be adhered to by company management. When companies comply with environmental regulations and requirements set by government or regulatory bodies, they can avoid penalties and fines that can reduce profitability. Conversely, violating environmental regulations can have a negative impact on company's reputation and create legal risks, which can affect long-term profitability and is concerned that it might affect the company's stock value thus potentially lowering firms value . Although green accounting may not have a direct impact on profitability, the allocation of environmental costs can provide greater long-term benefits in terms of operational efficiency, business sustainability, and reduced environmental risks. In addition to environmental costs incurred, companies also allocate costs to comply with applicable environmental policies, such as Law Number 32 of 2009 on Environmental Protection and Management in Indonesia.

Legitimacy theory states that company operations must be based on principles and standards that apply in the society and environment in which company operates. With an average allocation of environmental costs incurred of 4% of total operating costs and an average disclosure of the GRI index of 15 components in metal and mineral companies, this already shows sustainable business practices in the metal and mineral industry companies that have responsibility for the environment. In line with legitimacy theory, through the focus and dedication of metal and mineral companies that incure environmental costs in order to create good environmental performance, companies can gain wider and stronger legitimacy in society. In addition, the impact of green accounting carried out by companies takes a longer time to see its effect on firm value, where green accounting carried out by companies can create operational efficiencies such as more efficient energy use, waste reduction, and use of more sustainable raw materials, can reduce long-term operational costs.

The findings of this study align with the research carried out by Sukmadilaga et al. (2023) and Martini et al. (2022), as both studies did not identify any impact of green accounting on firm value. The study assumes that the viewpoint on green accounting being considered has a relatively insignificant economic effect and is regarded as expenses incurred as compensation due to losses or damages caused.

IV. CONCLUSION

Based on the hypothesis testing results of this study, it can be concluded that green accounting does not have direct impact on firm value. This study considers environmental costs and environmental performance resulting from green accounting practices by companies, which do not show a direct relationship with financial performance. As a result, the relationship between green accounting and firm value is not apparent. Furthermore, environmental costs incurred also serve to comply with existing environmental policies. Environmental performance does not have a significant influence on firm value because the industry examined in this study is related to natural resources, where environmental impact management becomes a responsibility that must be adhered to by company management. This study has limitations, as the sample used is limited to metal and mineral industry. Subsequent research is expected to explore and analyze green accounting in other industries or sectors that have environmental impacts, such as the manufacturing and energy sectors. According to Ditjen PSLB3 (2019), manufacturing industry is the largest waste producer, and according to Climate Watch data, energy sector is the largest contributor to greenhouse gas emissions in Indonesia (Putri 2023).

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Application Of The Beneish M-Score And Z-Score Models In Soe Companies

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ABSTRACT

Financial reports, such as those of SOEs, provide an overview of a company's financial status. SOEs are often considered less transparent in their financial reporting. As a result, SOEs are more vulnerable to financial statement fraud. The purpose of this study is to collect data on the utilization of the Beneish M-Score model and the Altman Z-Score model in detecting financial statement fraud in state-owned companies from 2008 to 2021. This study uses descriptive statistics and secondary data types of financial statements of state-owned companies that come from the company's website. The findings of this study include Z-Score shows the unhealthy condition of the company; Unhealthy financial conditions are not the only factor that causes companies to manipulate financial statements; Unhealthy financial health conditions are not always a factor that causes companies to manipulate financial statements; Financial manipulation carried out by companies often has a bad impact on the company's financial condition in the future.

Keywords *: Beneish M-Score, Z-Score, BUMN*

I. INTRODUCTION

Financial reports summarize the company's financial position. Furthermore, this information may be utilized to present a complete picture of the company's financial performance. As a result, while making business decisions, people may rely on information from financial reports (Ariesta & Nurhidayah, 2020). Financial reports, according to Trianto et al. (2017), are reports that describe the company's financial status at a specific moment. Companies can use financial reports to present information about their current financial status and operational performance over a certain time period. The information presented in financial reports must be accurate and relevant, according to the appropriate National and International Accounting Standards (SAK-PSAK and IAS-IFRS). This is because accounting records must cover all transactions in order for financial reports to have relevant information in accordance with current accounting standards (Stickney & Weil, 2007). FIFO and Average are corporate management evaluations of business continuity (going concern) that outline how an entity's circumstances and conditions in the present and future periods, as well as how the corporate governance process has been effective in reducing the occurrence of fraud, human error, and minimizing risks that are damaging to the firm and all other stakeholders.

In this scenario, supplying incorrect information, whether deliberate or not, is a type of legal offense. Similarly, in the form of actions designed to delete information about activities and business financial information. Facts released to the public in the form of internal accounting problems lead to the organization's demise. Furthermore, the Enron case signaled the beginning of exposing information concerning the reasons that led to the failure of other major American corporations, including Global Crossing, Tyco International, and Xerox Corporation, Adelphia Communication, Worldcom, and Walt Disney Company (Irianto, 2003). BUMN (State Owned Enterprises) enterprises are not immune to financial report modification or fraud. BUMN enterprises are frequently perceived as having less transparency in their financial reporting. As a result, state-owned enterprises are more prone to financial statement fraud. According to Hadiwidjojo and Lukviarman (2015), a lack of openness can contribute to misleading financial reporting.

Furthermore, state-owned enterprises are frequently overly reliant on the government, both in terms of regulation and finance. This might have an impact on management decisions when it comes to reporting corporate finances. Hanafi and Rahmawati (2015) conducted research. demonstrates that reliance on the government may be a factor contributing to dishonest financial reporting. BUMN enterprises wield considerable power and frequently play a crucial role in the national economy. As a result, the financial health of BUMN enterprises can be a significant indication of the overall health of the national economy. According to Rusmin and Ghozali (2015), the financial health of state-owned enterprises can have an impact on national economic performance. The reason for committing fraud, according to agency theory, is influenced by the interests of managers who can affect shareholders' judgment of their performance (Kontesa et al., 2021).

Since the emergence of scandals and incidents of accounting fraud at state-owned enterprises, the public's perception has shifted have less faith in their relevance and veracity. Essentially, the financial status is reported in the financial statements to offer a summary of the company's facts. Altman's model, an investigation of company insolvency, may be used to identify fake financial statements, according to Rosplock (2001). Furthermore, according to Barsky et al. (2003), there are two analytical approaches for detecting fraudulent financial statements. First, we may utilize Altman's 1968 model, which employs a set of liquidity, profitability, leverage, solvency, and activity ratios that are supposed to predict firm failure. Furthermore, Altman's model, an investigation of company insolvency, can be used to identify fake financial statements, according to Rosplock (2001). Furthermore, according to Barsky et al. (2003), there are two analytical approaches for detecting fraudulent financial statements. First, we may utilize Altman's 1968 model, which employs a set of liquidity, profitability, leverage, solvency, and activity ratios that are supposed to predict firm failure. These ratios are then calculated using the Z-score, a widely used formula. The research of Barsky et al. (2003) was used as a reference in this investigation. (Barsky et al., 2003) employs the Altman Z-Score financial distress prediction model and the Beneish M-Score analytical model to detect fraud in financial statements. As a result, the researchers used these two models to the investigation of financial statement fraud detection in the sampled BUMN enterprises. Through the Z-Score (revised) and the new Beneish model, the Beneish M-Score, which consists of eight primary ratio indices described in the M-Score. This distinguishes this study from that of Barsky et al. (2003).

II. RESEARCH METHOD

In this study, descriptive statistical research was used. According to Hasan (2001), descriptive statistical research is a subset of statistical research that focuses on how to collect data and communicate it to laypeople in a logical manner. The data utilized in this study is secondary data. A deductive approach was used in the data research analysis approach. This study uses purposive sampling in determining the research sample with the category of BUMN companies that publish financial reports and can be accessed from 2008 to 2021, and non-financial BUMN companies. Two models were used to examine the data in this investigation. Beneish's (1999) methodology is used to evaluate data in order to uncover earnings disclosure in the form of earnings overstatement. Second, Altman's z-score methodology is utilized to identify financial statement disclosures in corporate bankruptcy.

III. RESULTS AND DISCUSSION

The Beneish M-Score and Z-Score were used at PT. Pertamina (Persero).

Table 1. M-Score and Z-Score of PT Pertamina

Year	M-Score	Z-Score
2008	-2.23	3.2
2009	-2.28	2.6
2010	-0.16	3.6
2011	-2.33	3.2
2012	-1.90	3.0
2013	-1.31	2.6
2014	-3.00	2.5
2015	-2.82	1.9
2016	-2.60	2.1
2017	-1.39	2.0
2018	-2.25	2.1
2019	-2.55	2.0
2020	-2.91	1.7
2021	-2.15	1.8

Pertamina (Persero) manipulation from 2008 to 2021 in 2010, 2012, 2017, and 2021, as shown on the results of the Z-Score study in those years.

It is well known that the company's financial health is in poor shape (grey area / prone to bankruptcy).

According to the statement (Bell, 2008), concluded sources of strain (pressure) on the firm, which is the reason for the corporation in distorting its financial accounts. While the Z-Score value in 2009 indicates financial health is in a state prone to bankruptcy / gray area, the M-Score value in 2009 indicates no indication of manipulation, indicating that the financial condition is prone to bankruptcy / gray area is not always the cause the company manipulates the report his finances.

The Z-Score number of PT. Pertamina (Persero) in 2014, 2015, 2016, 2018, 2019, and 2020 indicates that the business's financial health is susceptible bankrupt/grey region, but the M-Score data reveal that the company had no sign of manipulation in those years. According to (Bell, 2008), this occurs as a result of manipulation done in earlier years, which has an influence on conditions financial health in following years.

PT. Garuda Indonesia Tbk. uses the Beneish M-Score and Z-Score.

Table 2. M-Score and Z-Score of PT Garuda Indonesia

Year	M-Score	Z-Score
2008	-5.11	1.93
2009	-5.10	0.69
2010	-13.75	1.53
2011	-4.25	2.19
2012	-4.72	2.06
2013	-1.69	1.62
2014	-6.52	0.49
2015	-5.26	1.34
2016	-2.86	1.06
2017	-6.28	0.71
2018	-4.70	0.74
2019	-1.99	0.40
2020	-4.24	-1.59
2021	-7.38	-3.97

PT Garuda Indonesia Tbk from 2008 to 2012, and it does not indicate any indicators of manipulation in the report of his finances. This demonstrates that the financial position at the time was not healthy, which was not a motivating cause for PT Garuda Indonesia to distort the financial accounts. Whereas in 2013 and 2019, any sign of manipulation is revealed in the value M-Score of -1.69 in 2013 and -1.99 in 2019, so are the company's financial health conditions in 2013. This indicates that PT Garuda Indonesia is in a condition of threatened bankruptcy/distress. Assume that the company's financial situation in 2013 and an unfavorable 2019 prompted PT Garuda Indonesia to manipulate financial records.

In 2013, 2015, 2016, 2017, 2018, 2020, and 2021, the financial situation is threatened by bankruptcy/distress, but there are no signs of manipulation. It demonstrates that the financial situation is not in good shape. Healthy is the effect of such manipulation in 2013 and 2019, respectively, in accordance with Bell's (2008) declaration that manipulation Financial statements have the potential to have a detrimental impact on future financial situations.

The Beneish M-Score and Z-Score were used at PT. Krakatau Steel (Persero) Tbk.

Table 3. M-Score and Z-Score of PT Krakatau Steel

Year	M-Score	Z-Score
2008	-2.92	2.3
2009	-2.56	2.4
2010	-1.29	2.2
2011	-1.01	1.9
2012	-2.69	1.5
2013	-2.62	1.4
2014	-4.01	0.6
2015	-5.23	0.3
2016	-4.55	0.5
2017	-3.93	0.5
2018	-3.73	0.4
2019	-3.46	-1.6
2020	-5.15	-0.4
2021	-4.12	-0.2

PT Krakatau Steel's M-Score and Z-Score computations, which reveal that the company's financial health was in the gray area/prone to bankruptcy in 2008 and 2009, although there was no sign of financial statement manipulation. This demonstrates that financial pressure in the form of a company's poor financial status is not necessarily a motivator for corporations to falsify their financial accounts. In 2010 and 2011, PT Krakatau Steel's M-Score computation revealed evidence of financial statement manipulation, as did the company's Z-Score, which suggested a situation prone to bankruptcy/gray area. This demonstrates that in 2010 and 2011, corporations manipulated their financial reporting due to poor financial situations. After it, in 2012-2021, showing that the company's financial position is in the threat of insolvency / crisis zone, suggesting that the fall in the company's financial condition was caused by manipulation in the previous year, namely 2011.

The Beneish M-Score and Z-Score were used at PT. Jasa Marga (Persero) Tbk.

Table 4. M-Score and Z-Score of PT Jasa Marga

Year	M-Score	Z-Score
2008	-1.29	1.25
2009	-2.01	1.12
2010	-3.38	1.18
2011	-0.88	1.13
2012	-3.00	1.09
2013	0.81	1.06
2014	-3.06	0.96
2015	-1.04	0.81
2016	23.69	0.78
2017	-2.56	0.81
2018	-4.00	0.66
2019	-4.08	0.35
2020	-3.56	0.45
2021	-3.09	1.36

PT Jasa Marga suggested manipulation in 2008, 2009, 2011, 2013, 2015, and 2016, and that the Z-Score value of PT Jasa Marga indicated that the company's financial state is threatened with bankruptcy/distress zone. This suggests that PT Jasa Marga's fabrication of financial statements is motivated by an unhealthy condition of financial strain.

The M-Score value of PT Jasa Marga does not show any indication of financial statement manipulation in 2010, 2012, 2014, 2017, 2018, 2019, 2020, and 2021, but the company's Z-Score value indicates the company's financial health position is in a state of being threatened with bankruptcy /distresszone. This is consistent with Bell's (2008) assertion that manipulation Financial statements that are inaccurate might have a detrimental influence on the organization in the future.

The Beneish M-Score and Z-Score were used at PT. Biofarma (Persero).

Table 5. M-Score and Z-Score of PT Biofarma

Year	M-Score	Z-Score
2008	-2.32	5.43
2009	-0.09	5.05
2010	-1.64	4.67
2011	-2.19	6.26
2012	-1.30	7.29

2013	0.41	6.04
2014	-1.21	6.40
2015	-1.05	6.38
2016	-2.77	6.40
2017	-2.39	5.72
2018	-2.66	3.91
2019	-1.31	1.37
2020	-5.85	1.22
2021	-0.40	2.01

PT Biofarma's financial position was in good health in 2008, 2016, 2017, and 2018, with no sign of manipulation, while in 2009-2015, the company's M-Score score indicated manipulation. Meanwhile, PT Biofarma's Z-Score scores indicate that the company's financial health is in good shape. This suggests that the manipulation is not motivated by financial concerns at the firm.

In 2019 and 2021, the company's M-Score and Z-Score both exhibit signs of manipulation, indicating an unfavorable state of the company's health. This demonstrates that weak financial condition will be the driving reason for firms to manipulate in 2019 and 2021. 2020 demonstrates that the company's Z-Score value is unhealthy, while its M-Score number is excellent does not reveal any signals, implying that poor financial situations are not necessarily a motivator for corporations to manipulate.

The Beneish M-Score and Z-Score are used at PERUM Perumnas.

Table 6. M-Score and Z-Score of PERUM Perumnas

Year	M-Score	Z-Score
2008	-0.54	1.05
2009	0.71	1.40
2010	0.78	1.57
2011	-0.45	1.19
2012	-2.36	0.72
2013	0.47	1.29
2014	-0.36	1.26
2015	0.62	1.42
2016	0.06	1.40
2017	0.43	1.65
2018	-0.30	1.38
2019	0.36	1.03
2020	-10.31	0.41
2021	0.02	0.47

In 2008, 2009, 2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, and 2021, the M-Score Perum Perumnas indicates manipulation, and the Z-Score indicates that the corporation is not financially healthy. As can be shown, financial pressure is a motivating element for Perum Perumnas to manipulate its financial records.

Then, in 2012 and 2020, the company's financial position was in the threat of bankruptcy/distress zone, showing that the fall in the company's financial condition was the consequence of manipulation carried out the previous year.

IV. CONCLUSION

Based on the findings of the preceding chapter's study and debate, the following conclusions are reached:

1. According to the results of the six sample firms, the Z-Score, which indicates an unhealthy company situation, is frequently used by

corporations to distort their financial accounts.

2. As demonstrated by PT Biofarma (Persero), unsound financial conditions are not the only element that corporations use to manipulate their financial reporting.
3. Unhealthy financial situations are not necessarily a motivator for corporations to falsify their financial statements.
4. Financial manipulation by firms frequently has a detrimental impact on the company's future financial status.

Regarding the limitations of this study, further research can add to the population and sample size by readjusting to expand the scope of the research sample. This is due to the limited object of this research which only uses 6 BUMN companies in Indonesia. In addition, further research can use other models to provide effective results.

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ANALYSIS OF ABNORMAL RETURNS BEFORE AND DURING THE COVID-19 PANDEMIC ON HOTEL, RESTAURANT AND TOURISM SUB-SECTOR STOCKS LISTED ON IDX

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ABSTRACT

The purpose of this study was to determine the difference in average abnormal returns before and during COVID-19 in hotel, restaurant and tourism sub-sector stocks listed on the IDX. The type of data used in this study is secondary data. Determination of the sample in this study using purposive sampling method with certain criteria so that 37 samples were obtained. The analysis technique used in this research is one-sample t-test and paired sample t-test with an observation period of 100 days. This study uses daily data on hotel, restaurant and tourism sub-sector stocks. The results of the one-sample t-test show that the abnormal return is not significant around the window period so it can be concluded that covid-19 has no effect on abnormal return. Meanwhile, the results of the paired sample t-test show a significance value of 0.876> 0.05. From these results it can be concluded that there is no significant difference in average abnormal returns before and during the COVID-19 pandemic.

Keywords : Abnormal return; Event Study; COVID-19

I. INTRODUCTION

The year 2020 seems to be a new historical record for the world. All parts of the world were faced with a pandemic. The Coronavirus Disease-2019 (COVID-19) outbreak spread rapidly and affected production and people's lives. Throughout 2020, this pandemic has paralyzed the economy and caused economic crises around the world (Purwanto, 2021). Indonesia is one of the many countries in the world that is also affected by the occurrence of COVID-19. Indonesia experienced an economic shrinkage of 4.1%. The Central Bureau of Statistics (2019) revealed that Indonesia's economic growth in the third quarter based on prevailing prices of Gross Domestic Product (GDP) decreased by IDR 379.7 trillion. The contraction of the Indonesian economy is still caused by weak public consumption so that import performance has also experienced a deep contraction due to very limited domestic activity (PPN / Bappenas, 2020).

This pandemic also has an impact on the economic sector such as the capital market. Trading that occurs on the stock exchange is certainly affected as a result of the COVID-19 event. This is characterized by a decline that can be said to be quite drastic in the Composite Stock Price Index (JCI) on the Indonesia Stock Exchange (IDX). The JCI continued to experience a slump until it finally reached its lowest position at the level of 3,937.63 on March 24, 2020. From the closing position in 2019 with a range of 6,299.53, it is evident that the JCI experienced a very rapid decline of 37.49%. The Indonesia Stock Exchange (IDX) was forced to temporarily suspend the buying and selling of shares. This was caused by the securities index which continued to decline drastically exceeding 5% on the same day (Melani, 2021). The COVID-19 pandemic that occurred in Indonesia affected the capital market and this event provided negative signals (bad news) for investors. Investors who have share ownership prefer to trade back their shares to avoid losses (Saraswati, 2020).

Various industrial sectors ranging from the financial sector, tourism, manufacturing, and the food and beverage sector have been affected by the COVID-19 pandemic (Kartikaningsih, 2020). One sector that has been severely affected by the pandemic is the hotel, restaurant and tourism sector (Nasution et al., 2020). According to the Handbook of the Ministry of Tourism, Indonesia's tourism sector is one of the sectors that is very good in its development (Kemenparekraf, 2020).

In 2020, namely after COVID-19, the country's foreign exchange experienced a sharp decline so that the foreign exchange generated by the tourism sector in 2020 was only IDR 45.4 trillion. In addition, another thing that affects state revenue besides the tourism sector is the hotel sector. In 2016-2018, the hotel room occupancy rate increased significantly. Then experienced a decline but not significant in 2019 by 3.94% and in 2020 experienced a sharp shrinkage of 21.02%. The decline in hotel occupancy and the lack of tourists has an impact on restaurants or restaurants where the majority of consumers come from tourists (Nasution et al., 2020).

Apart from providing services, companies listed on the Indonesia Stock Exchange (IDX) in the hotel, restaurant and tourism sub-sector also have share ownership. With conditions such as the COVID-19 event, it will certainly have an influence on the shares of the restaurant, hotel and tourism sector (Mailangkay et al., 2021). According to Deasy Lestary Kusnandar (2020), a market will respond to very important information because it is able to cause changes in terms of prices which will then make changes to abnormal returns. Abnormal Return is the result before and after the event in the form of the difference that exists between the expected profit and the actual profit (Agfah & Azhari, 2021).

The theory applied in this research is signaling theory. Signal theory explains information which can then influence investment decision making and cause market reactions. Spence was someone who first introduced this theory in 1973 (Darmayanti et al., 2021). Ross (1977) in signal theory stated that investors react to the stock market based on information that can have an impact on the company and the stock market. The occurrence of the COVID-19 pandemic in Indonesia is a form of information that can influence stock market conditions (Wicaksono & Adyaksana, 2020). Information that has been published shows a signal for investors making investment decisions. If the published information is considered to be a good signal, then it can be said that this news will influence changes in abnormal returns where abnormal returns increase, and vice versa (Hartono, 2017).

II. RESEARCH METHOD

In this study, the method applied is the event study method, which has a definition as a research method that functions as a tool to calculate its effect on an event (event) (Irmayani, 2021). In this study, an event that is considered a published announcement is the COVID-19 event. The data used are daily closing stock prices. This test applies a research period of 100 days, namely 50 days before the COVID-19 pandemic, and 50 days during the COVID-19 pandemic.

The population used in this study are all companies listed on the Indonesia Stock Exchange (IDX). This study uses a method to determine the research sample criteria called the purposive sampling method. The sampling criteria applied in the research conducted consisted of:

Table 1 Research Sample Criteria

No.	Criteria	Amount
1.	All companies listed on the Indonesia Stock Exchange during the observation period	713
2.	**Excluded:** Companies not engaged in hotels, restaurants and tourism.	(667)
3.	Hotel, restaurant and tourism sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the observation period.	46
4.	**Excluded:** Companies that experienced corporate actions during the observation period	(2)
5.	**Excluded:** Companies that are suspended and delisted during the observation period.	(0)
6.	**Excluded:** Companies that did not publish their daily stock reports during the observation period.	(7)
7.	Total companies used as research samples.	37

The variable in this study is abnormal return, where abnormal return is the excess of the actual return over the normal return. The following is the calculation formula for abnormal return carried out in this study:

i. Calculating Actual Return

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$$

Description:

Ri,t= actual return of issuer i on day t

Pi,t = stock price of issuer i on day t
Pi,t-1 = stock price of issuer i at time t-1

ii. Calculating Market Return (Rm)

$$R_m = \frac{IHSG_t - IHSG_{i,t-1}}{IHSG_{i,t-1}}$$

Description:

Rm = market return at time t

IHSGt = Composite Stock Price Index at at time t

IHSGt-1 = Composite Stock Price Index at at time t-1

iii. Calculating Abnormal Return

Abnormal return is the difference between actual return and expected return. The calculation of expected return in this study uses the market adjusted model method so that the expected return is the same as the market return. Then the calculation of abnormal return uses the following formula:

$$AR_{i,t} = R_{i,t} - R_m$$

Description:

ARi,t = abnormal return of stock i on day t

Ri,t = actual stock return i on day t

Rm = expected return of stock i on day t

III. RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive test aims to provide an overview of the minimum, maximum, mean, and standard deviation values of the related variable calculations. The variable in this study is Abnormal Return. Based on the results of the descriptive test that has been carried out, it can be described as follows:

Tabel 2 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BEFORE	50	-.0269	.0550	.001475	.0143029
AFTER	50	-.0275	.0568	.001442	.0145898
Valid N (listwise)	50				

Based on the table above, the average abnormal return of hotel, restaurant and tourism sub-sector stocks before the COVID-19 pandemic was 0.001475 with a standard deviation of 0.0143029. Meanwhile, during the COVID-19 pandemic, the average abnormal return corrected by 0.001442 with a standard deviation of 0.0145898. The analysis results show that there is a reaction by investors to the COVID-19 pandemic which results in differences in abnormal returns before and during the COVID-19 pandemic.

Normality Test

The normality test in this study was carried out to determine whether the data was normally distributed or not. In this study, to determine the normality of a data, Kolmogrov-Smirnov was used with a significance value of 0.05.

Tabel 3 Normality Test
One-Sample Kolmogorov-Smirnov Test

		BEFORE	AFTER
N		50	50
Normal Parameters[a,b]	Mean	.001475	.001442
	Std. Deviation	.0143029	.0145898
Asymp. Sig. (2-tailed)	.104[c]	.175[c]	

Based on the table above, the one-sample Kolmogrov Smirnov normality test results were obtained before the COVID-19 pandemic with a significance level of 0.104 and during the COVID-19 pandemic had a significance level of 0.175. Based on the normality test results in the table above, it can be concluded that the abnormal stock return data distribution of the hotel, restaurant and tourism sub-sector before and during the COVID-19 pandemic has a normal distribution because it has a significance level of more than 0.05.

Hypothesis Test

Hypothesis testing in this study uses one sample t-test and paired sample t-test with the aim of testing information content by finding variations or differences in abnormal returns between before and during the occurrence of COVID-19 which has an impact on the hotel, restaurant and tourism sub-sectors. This test was conducted using SPSS version 25 and the following results were obtained:

1. One Sample t-test

Based on the results of the one sample t-test test during the observation period before the COVID-19 pandemic, 9 days produced a significant abnormal return and 41 days produced an insignificant abnormal return, while the test results during the COVID-19 pandemic, namely 14 days produced a significant abnormal return and 31 days produced an insignificant abnormal return. Thus, most of the abnormal returns are insignificant, namely sig. > 0.05. Based on this, it can be concluded that H0 is accepted, which means that there is no effect of COVID-19 on abnormal stock returns in the hotel, restaurant and tourism sub-sector.

2. Paired Sample T-test

Based on the results of the paired sample t-test, it shows that the average abnormal return before and during the COVID-19 pandemic has a significance value of 0.876. The significance level in this study is α = 0.05 which means that the significance value is greater than 0.05, so H0 is accepted and H1 is rejected. Thus, it can be concluded that there is no significant difference in abnormal stock returns in the hotel, restaurant and tourism sub-sector before and during the COVID-19 pandemic.

Discussion

From the tests carried out, hypothesis testing using the one sample t-test test on abnormal stock returns in the hotel, restaurant and tourism sub-sectors listed on the Indonesia Stock Exchange (IDX) resulted in the conclusion that the COVID-19 pandemic has no effect on abnormal returns. This is indicated by most of the significance values obtained are more than 0.05. In addition, another hypothesis test conducted is the paired-sample t-test. From the paired-sample t-test results, it is concluded that there is no significant difference in abnormal returns 50 days before and 50 days during the COVID-19 pandemic. The paired sample t-test test shows a significance value of 0.876. This significance value is greater than 0.05 so it can be concluded that there is no significant difference between before and during the event, so H1 is rejected.

Although there is no significant difference, when viewed from the average abnormal return during the event which is lower at 0.001442 compared to before the event at 0.001475, it can be interpreted that there was a negative market reaction when the COVID-19 pandemic broke out in Indonesia. This is in line with the grand theory in this study, namely signal theory. Referring to the foundation of signaling theory, which explains if an event can provide a signal and result in a reaction due to information in the market (Kusnandar & Bintari, 2020).

The results of this study are in line with previous studies that have been conducted, namely research by Feria-Domínguez et al. (2017) and Feranita (2018) which show that there is no significant difference in abnormal returns in the period before and during unexpected events.

IV. CONCLUSION

Based on the research that has been conducted related to the analysis of differences in abnormal returns before and during the COVID-19 pandemic in the hotel, restaurant and tourism sub-sector stocks listed on the Indonesia Stock Exchange, it can be concluded that there is no significant difference in abnormal returns in the 50-day period before and 50 days during the COVID-19 pandemic in Indonesia. This is indicated by the abnormal returns of most companies that did not experience significant changes both before and during the pandemic.

This is in line with the one-sample t-test conducted. The one-sample t-test shows that around the window period there is no significant abnormal return. This is indicated by the significance value which is mostly > 0.05. This is supported by the paired-sample t-test hypothesis test that was also conducted. From the paired-sample t-test, a significance value of 0.876 > 0.05 was obtained. From the results of this test, it can be concluded that the information derived from the event is not enough to make stock price movements abnormal in 37 companies, so there is no significant change in abnormal returns. In addition, this indicates that investors are not interested in investing throughout the study period.

In this study, there are limitations. The first limitation is that this research has limitations in 3 sectors, this may not be generalized to other sub-sectors, so the suggestion for future research is to make comparisons with other sub-sectors, this research only focuses on abnormal returns, so it is hoped that future researchers will add other research variables such as transaction volume, and this research only has a limited observation period of 100 days, while COVID-19 occurred for 2 years, so it is hoped that future research can conduct research with a longer period.

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The Influence Of Financial Indicators In Predicting The Financial Distress Of Manufacturing Companies

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ABSTRACT

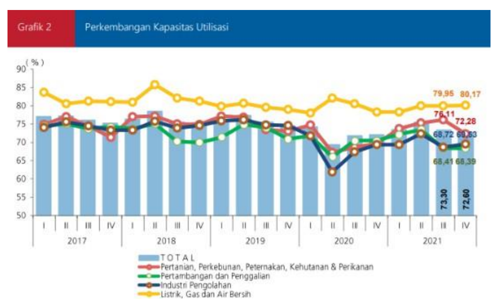
The purpose of this study was to examine financial indicator factors, namely financial ratios, namely liquidity ratios, profitability ratios, leverage ratios, activity ratios with interest rate proxies against financial distress. Financial Distress measurement uses the Altman Z-Score method. The test population in this study are manufacturing companies that are listed on the IDX and have negative profits for two years or more, are consistent in reporting financial statements ending December 31 for 2019-2021 and are reported using the rupiah currency. The selected data are 30 companies as research samples. The analysis carried out is multiple linear regression with SPSS version 25. The results of this study indicate that the financial ratios Current Ratio (CR), Return On Assets (ROA), Debt to Equity (DER), Total Asset Turnover (TATO) have a significant negative effect on financial distress.

Keywords :Financial Ratios, Financial Distress, Altman Z-Score

I. INTRODUCTION

Rapid economic development causes economic instability and affects company financial performance. Large market competition makes it difficult for companies to maintain their existence (Venusita 2019). When a company cannot survive market competition, it will have a negative impact on decreasing sales volume, lack of income, decreasing profits and ultimately the company being unable to pay its obligations (Vici Ardian et al., 2017). So companies need to implement strategies to generate profits for the company's survival so that it is maintained and survives for a long time and avoids bankruptcy. Good financial management is the main aspect of a company. Companies must be able to monitor and manage their financial aspects to avoid financial distress. In agency theory, it is not only financial management that must be considered in avoiding financial distress, but also when agents make wrong decisions and result in losses and the company cannot pay its debts (Suryani Putri 2020). According to Platt and Platt (2002) in Fatmawati (2017) financial distress is the occurrence of financial difficulties in an entity or company before it goes bankrupt. If this financial problem is left unchecked, the company will experience bankruptcy due to worsening financial conditions.

The occurrence of Covid-19 resulted in companies throughout 2019-2021 experiencing a decline in financial performance and this was felt in almost every economic sector. The unstable increase in raw material prices due to fluctuations in the rupiah exchange rate makes it difficult for manufacturing companies to control their financial systems (Indriyani, E. 2021). The lockdown situation implemented by various countries has also been a factor in the decline in manufacturing activity, almost all manufacturing companies have slumped and even temporarily closed due to limited supplies of materials, so that companies cannot carry out operational activities.



In the graph of the development of used product capacity, the manufacturing sector experienced the most drastic decline compared to other sectors. In the third quarter of 2019 it was 74.70% and experienced a decline in the fourth quarter of 73.11%, this is the second lowest decline after the mining and quarrying sector. In 2020 the manufacturing sector experienced a very significant decline compared to other sectors. The electricity, gas and clean water sectors experienced an increase of 80.59%, the agricultural sector decreased by 73.11%, the mining sector decreased by 70.88%, and the manufacturing sector decreased by 67.38%. From the picture above, it can be concluded that the manufacturing sector is the sector that has experienced the largest decline in weighted net balance compared to other sectors.

Liquidity Ratio is a ratio that states the level of an entity's ability to pay short-term obligations. In this research, the Current Ratio (CR) proxy is used to predict financial distress conditions. According to Muwanir (2005:72) in Ginting (2017) Current Ratio (CR) shows the level of security (Margin of Safety) which is useful for lenders in the short term, knowing the Margin of Safety can convince creditors to provide funds for company operations at a certain level. agreed loan interest. According to research conducted by Asfali (2019), the liquidity ratio with the CR proxy has a significant negative influence in predicting financial distress. This is in line with research conducted by Cahyani & Indah (2021) which states that the CR proxy has a significant negative influence in predicting financial distress. However, there is also research that contradicts the results of the research above, namely research conducted by Carolina et al., (2018) and Kusumawati & Birnanitta (2020) which states that the liquidity ratio with the Current Ratio proxy has no influence on financial distress.

H1: Liquidity Ratio (Current Ratio) has a negative effect on Financial Distress

Profitability ratios according to Fitriani & Huda (2020) are ratios that can calculate a company's ability to generate profits from assets that have been used, or profitability ratios measure how much profit is generated from asset productivity. The high profitability ratio in the company also shows good financial performance. Return On Assets (ROA) shows the return or profit generated from company activities. By using ROA, the company's ability to gain profits can be determined (Carolina et al., 2018). If the ROA level in the company is high, it can be concluded that the company is able to generate profits and can fund the company's operational activities, and conversely, if the ROA level is low, the company is less able to generate profits and this can cause financial distress. Research by Agustini & Wirawati (2019) states that the ROA ratio has a significant negative influence on financial distress. However, this is contrary to the results of research by Wulandari (2020) which states that the ROA ratio has no influence on financial distress.

H2: Profitability Ratios (Return on Assets) have a negative effect on Financial Distress

The leverage ratio is one of the ratios that can be used to calculate the level of effectiveness of a company in using debt as capital to carry out its business activities (Syamsuddin et al., 2021). Research conducted by Ginting (2017) shows that leverage is said to be efficient in measuring its effect on financial distress because the greater the possibility of financial distress occurring, the smaller the leverage ratio in a company and vice versa. In this study, the leverage ratio is used as a proxy for the Debt Equity Ratio (DER) which is used to compare the amount of debt to equity. According to Cahyani & Indah (2021) this ratio is used to compare total debt with the capital owned by the Company to find out how much funds the Company uses from its debt to become capital. From this ratio, investors can see how much debt the company has compared to the equity owned by the company or its shareholders. Debt equity ratio is also used as a measure used in analyzing financial reports to show the amount of collateral available to creditors (Shidiq & Khairunnisa, 2019). The higher the DER value, the more the company uses debt for operational activities and the risk of financial distress is also higher, and conversely, the lower the DER value, the less likely the company is to experience financial distress, because the debt owned is relatively small and the capital owned by the company bigger than the debt. This research is in line with research by Cahyani & Indah (2021) which states that the leverage ratio with the DER proxy has a positive effect on financial distress.

H3: Leverage Ratio (Debt Equity Ratio) has a positive effect on Financial Distress.

According to Harahap (2013) the activity ratio is a ratio that shows the total turnover of assets as measured by sales capacity, or you could say how assets can be converted into sales. This ratio is also commonly called the asset utilization ratio, which is used to assess the intensity and effectiveness of company assets in generating sales. Total asset turnover is a ratio used to measure a company's effectiveness in managing total assets and generating sales (Hery, 2017). The higher the TATO value, the more efficiently the company uses its assets to generate income. The higher the TATO value, the company can avoid financial distress, and conversely, the lower the TATO proxy, the greater the possibility of the company experiencing financial distress. In Ratna's (2018) research, it was stated that TATO had a significant negative effect on financial distress. This is reinforced by research by Cahyani &

Indah (2021) which states the same thing. However, there is also research that contradicts the results of the research above, namely research conducted by Agustini & Wirawati (2019) and Shidiq & Khairunnisa (2019) which states that the activity ratio with the TATO proxy has no effect on financial distress.

H4: Activity Ratio (Total Asset Turnover) has a negative effect on Financial Distress

Companies certainly want to avoid conditions of decline in financial performance which can result in various losses for many parties, thus predicting financial distress conditions is something that needs to be done, in order to predict future risks (Agustini & Wirawati, 2019). In this research the author uses financial indicator factors in their influence on financial distress. In this research, the financial indicator factors used are financial ratios. Financial ratios can be interpreted as an index that connects numbers, then the ratio is obtained by operating it in the form of a division between these numbers (Kasmir, 2018). The numbers in financial ratios can be converted into useful information for making decisions within the company (Mas'ud & Srengga, 2015). Information on financial ratios in company financial reports includes liquidity, leverage, profitability and activity (Harahap, 2013). Thus, the benefits of this research are (1) to determine the influence of financial indicator factors as measured by financial ratios on financial distress conditions, (2) it can be used as a company decision making tool to determine financial strategies, (3) it can be used by parties Company external to analyze the Company's financial health.

II. RESEARCH METHOD

Testing in this research uses quantitative research methods. Quantitative research is research that uses data or numbers as the basis for its analysis, using secondary data in its collection. The population and sample of this research are manufacturing companies listed on the Indonesia Stock Exchange (BEI). Manufacturing companies that have negative profits for two consecutive years or more, manufacturing companies that consistently report their financial reports ending on December 31 for 2019-2021. , Manufacturing companies whose financial reports are reported using the Rupiah currency and all sub-sectors in manufacturing companies except the pharmaceutical sub-sector because they have positive profits during the 2019-2021 period due to increased demand due to Covid-19 conditions. From the sample criteria there are 171 manufacturing companies that meet The criteria are 30 manufacturing companies. The analysis technique in this research uses multiple linear regression. The aim of analyzing multiple linear regression is to obtain comprehensive data regarding the correlation between variables (Ghozali, 2016). To determine the significant influence between variables, you can use the following calculation:

$$Y = \alpha + \beta 1.\ X1 + \beta\ 2.\ X2 + \beta\ 3.\ X3 + \beta\ 4.\ X4 + e$$

III. RESULTS AND DISCUSSION

This research aims to test the influence of Financial Indicator Factors in predicting Financial Distress conditions in Manufacturing Companies. The data source for this research is the financial report published by IDX from 2019 to 2021. The financial report contains information about the company's financial condition which can be analyzed using financial indicators, namely financial ratios. Then the Financial Distress variable is also obtained from the company's financial reports by calculating the bankruptcy level in this research using the Altman Z-Score bankruptcy analysis method.

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residuals
N		90
Normal Parameters, b	Means	0.00
	std. Deviation	3.14
Most Extreme Differences	absolute	0.074
	Positive	0.074
	Negative	-0.052
Test Statistics		0.074
asymp. Sig. (2-tailed)		**.200[CD]**
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

From the results of the Kolmogorov-Smirnov test above, the Asymp value is produced. Sig. (2-tailed) from the regression results is 0.200. Thus, the Kolomogorov-Smirnov test results from the regression model have met the normality requirements with a Sig value. > α= 0.05. This means that it can be concluded that the data tested has a normal data distribution.

The multicollinearity assumption test is used to determine the level of association, cohesiveness or linear relationship between independent variables

Variable	Collinearity Statistics	
	tolerance	VIF
CR (X1)	0.640	1,563
ROA(X2)	0.518	1930
DER(X3)	0.432	2,317
TATTOO (X4)	0.523	1912

in table it is known that the VIF value of the four variables is less than 10. And the tolerance value of the five variables is more than 0.100. Thus it can be concluded that there is no multicollinearity in the data tested.

In the multiple linear regression model, it is necessary to test the occurrence of the variance equation from one residual to another. If the residuals have the same variance, then it is called homoscedasticity, whereas if the variances are not the same, it is called heteroscedasticity.

Variable	Sig.
CR (X1)	0.742
ROA(X2)	0.447
DER(X3)	0.419
TATTOO (X4)	0.644

Based on the Glesjer test results, the sig. of each of the variables above is 0.742, 0.447, 0.419, 0.644, > 0.05 so that the five variables in the regression model do not occur heteroscedasticity.

variabel	koefisien regresi (B)	Std. Error	Std Coefficient	t hitung	Sig.
(Constant)	4.354	0.690		6.313	0.000
CR (X1)	-1.041	0.489	-0.172	-2.131	0.036
ROA(X2)	-0.019	0.009	-0.181	-2.017	0.047
DER (X3)	-1.364	0.353	-0.380	-3.868	0.000
TATO (X4)	-2.297	0.909	-0.226	-2.525	0.013

The autocorrelation test was carried out to ensure that the linear regression model has a correlation between the confounding errors in a period t and the confounding errors in the previous period (t-1). If the test results find a correlation, then the finding will be called an autocorrelation problem. One way that can be done to test whether there is autocorrelation is to use the Durbin-Watson (DW test). Through this test, calculated DW values (d) and DW table values (dL and du) will be generated. The results of the DW test are as follows:

Research Model Autocorrelation Test

Criteria	Mark	Information
DL	1.5420	No Autocorrelation Occurs
DU	1.7758	
4-DU	2.2242	
Durbin-Watson	1,811	

Based on the table above, the DW value is 1.811. The dU and dL values seen in the Durbin Watson table are dU with k=5, k is the number of independent variables, and n (number of data) = 90 is 1.7758 and the dL value is 1.5420. It can be concluded that dU < DW < 4 – dU ; means there is no positive or negative correlation. 4 – dU = 4 – 1.7758 = 2.2242, it can be seen that 1.7758 < 1.811 < 2.2242. It can be concluded that the regression model above has no autocorrelation problems, either positive or negative. From this, it can be concluded that the data tested did not have autocorrelation problems.

Hypothesis testing in this research uses the T test, F test and R square with the following results:

variabel	koefisien regresi (B)	Std. Error	Std Coefficient	t hitung	Sig.
(Constant)	4.354	0.690		6.313	0.000
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TATO (X4)	-2.297	0.909	-0.226	-2.525	0.013

Priyanto (2012) The f test or regression coefficient test is jointly used to determine whether the independent variables jointly have a significant effect on the dependent variable. The test uses a significance level of 0.05. Simultaneous regression test (Test f) can be formulated as follows:

1) If Sig. < 0.05, then H0 is rejected, and Ha is accepted (significant)

2) If Sig. > 0.05, then H0 is accepted, and Ha is rejected (not significant)

Model	Sum of Squares	df	MeanSquare	F count	Sig.
Regression	1598683	4	399,671	38,667	.000[b]
residual	878,577	85	10,336		
Total	2477260	89			

Based on table above, it is known that the calculated F value = 38.667, and the Sig. = 0.000, while the value of F table with df (4.85) = 2.48. Thus the calculated F value is 38.667 > F table 2.48, and the Sig. 0.000 <0.05 so that H0 is rejected Ha is accepted, this is the five independent variables Current Ratio (X1), Profitability Ratio (X2), DER (X3), Total Asset Turnover (X4), together have a significant effect on Financial variables Distress (Y).

The coefficient of determination (R^2) is used to measure the capacity of the regression model's ability to explain variations in the dependent variable. The R^2 value is between 0 and 1. When the R^2 value is small, the independent variable is limited in explaining the dependent variable. Meanwhile, when R^2 approaches 1, the independent variable explains almost all of the information on the dependent variable.

Analysis of the coefficient of determination (R2)			
R	R Square	Adjusted R Square	std. Error of the Estimate
.803[a]	0.645	0.629	3.215

Based on table the model above shows that the value of Adjusted R Square = 0.629. This shows that 62.9% of Financial Distress (Y) is influenced by the variables Current Ratio (X1), Profitability Ratio (X2), Debt Equity Ratio (DER) (X3), Total Asset Turnover (X4), while the rest (100%) - 62.9%), namely 37.1% Financial Distress (Y) is influenced by other factors outside of this study.

In the multiple linear regression analysis, the following equation is obtained:

$$Y = 4.354 - 1.041\ CR - 0.019\ ROA - 1.364\ DER - 2.297\ TATO + e;$$

Current Ratio (CR) is the ratio used to measure a company's ability to meet short-term obligations with its current assets. A low CR indicates a company's weakness in managing its short-term obligations, such as paying debts or interest on loans. The lower the CR, the higher the chance of financial distress, and conversely, the higher the CR value, the lower the chance of financial distress, because the company is considered capable of fulfilling its short-term obligations. When companies start to be unable to pay their obligations, companies need to rely on external resources such as applying for additional loan funds or debt restructuring to survive. The results of this research can also be a signal for investors and other external parties in making financing decisions for companies. The results of this study are in line with Haras et al (2022) which state that the CR ratio has a significant negative effect.

The profitability ratio is a key indicator in measuring a company's financial health, because the ROA ratio measures a company's capacity to generate profits from the company's assets. The higher the value of the ROA ratio, the lower the chance for a company to experience Financial Distress, because then the company is proven to be able to utilize and manage its assets properly, and conversely the lower the value of the ROA ratio, the greater the chance for the company to experience Financial Distress because the company cannot take advantage of good company assets. A low ROA level indicates a negative signal for the company. According to Asfali (2019) if a company has a low ROA, it will have a negative impact on the company's liquidity and leverage.

The results of this study are supported by the research of Mas'ud & Srengga (2015), Cahyani & Indah (2021) and (Asfali, 2019) which state that ROA has a significant negative effect on Financial Distress.

The leverage ratio is one of the ratios that can be used to calculate the effectiveness of a company in using debt as capital to carry out its business activities (Syamsuddin et al., 2021). Research conducted by Ginting (2017) shows that leverage is said to be efficient in measuring its effect on financial distress because the greater the possibility of financial distress, the greater the leverage ratio in small companies and vice versa. The results in this study are significantly negative, when the DER value is high, the risk of financial distress in a small company and vice versa when the DER is low, the risk of the company experiencing financial distress is greater.

Total Asset Turnover (TATO) is used to measure how efficient a company is in using assets and generating income. The lower the TATO value, the higher the chance for a company to experience financial distress and vice versa, the higher the TATO value, the lower the chance for a company to experience financial distress. According to (Anjasari et al., 2020) The downward trend in sales over time can also be reflected in the low TATO value, so that the company does not have sufficient income to cover its operational costs and financial obligations. This research is in line with the research by Agustini & Wirawati (2019) which states that the TATO ratio has a significant negative effect on financial distress.

IV. CONCLUSION

The purpose of this study was to determine the effect of financial indicator factors on financial distress in manufacturing companies in 2019-2021. Based on the analysis carried out using multiple regression analysis in the SPSS 25 program, it can be concluded that the Ratio of Liquidity, Profitability, Leverage and Activity has a significant negative effect on predicting symptoms of financial distress, because the higher the ratio, the less likely the company will experience financial distress, and conversely, the smaller the ratio, the greater the risk of financial distress occurring in the company.

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GCG, Profitability And Solvency On Stock Price WithFirm Size As Control Variable

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ABSTRACT

Researchers have a goal to determine the effect of GCG (Good Corporate Governance), profitability, solvency on stock prices with company size as a control variable. This study uses annual report data on companies (secondary data). The population used by the researchers were companies that received CGPI ratings and IDX listings for the 2018 – 2021 period. The samples used by the researchers were 6 companies. The purposive sampling method was used by researchers to obtain the sample. Researchers tested the data with the SPSS 23 program. Researchers used multiple linear regression methods in their tests. This study shows the simultaneous results that GCG, profitability, solvency and company size affect the stock price of the company. Partially this study shows the results that profitability, solvency and company size do not affect stock prices, while GCG (Good Corporate Governance) has an effect on company stock prices.

Keywords : Good Corporate Governance, profitability, solvency, company size, stock price.

I. INTRODUCTION

The GCG concept was first launched in Indonesia by the Indonesian government and the International Monetary Fund (IMF) during the post-crisis economic recovery period of 1997-1998. During this period the crisis had a major impact, namely many companies went into liquidation, forcing the government to restructure and recapitulate.

GCG is included in efforts to resolve stakeholder conflicts and ensure that the company is managed effectively. This is related to agency theory which divides the correlation between owner and management. Agency conflicts arise as a result of the separation of interests between owners and management. Agency conflicts can arise when managers and shareholders have competing needs and objectives, namely as agent and principal. In other words, GCG can aim to regulate and prevent problems within the company (Situmorang & Simanjuntak, 2019). Wahyudin & Solikhah (2017) also stated that the implementation of GCG is required by stakeholders because it has a positive impact in the long term.

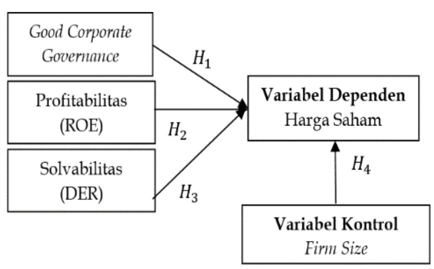
According to Safitri & Mukaram (2018), ROE is an important statistic for shareholders because it measures the rate of return on shareholder investment in a company. Companies that have high ROE may be more successful in running and managing capital to achieve large profits (Levina & Dermawan, 2019).

The Solvency Ratio is associated with funding decisions where corporations prefer debt financing over their own capital (Darmawan, 2020: 73). The solvency or leverage ratio is the ratio used to calculate the amount of debt a company must pay to fulfill its assets (Levina & Dermawan, 2019). The higher the loan interest rate that must be absorbed by the company, the greater the debt used to fund the company's assets. The smaller the DER ratio, the smaller the company's liquidity risk (Ramadhan & Nursito, 2021).

According to Nurulrahmatiah & Pratiwi (2020), the company's performance is directly related to the level of income which in turn affects the level of the company's stock price. According to his findings, GCG has a significant and beneficial effect on stock prices. The stronger the company's financial performance, the more attractive investors will be to buy the company's shares resulting in an increase in the purchase and price of the company's shares. It can be concluded that GCG has an impact on stock prices.

Based on this research background, researchers will conduct research on the effect of GCG, profitability, and solvency on stock prices in companies that obtain CGPI ratings and are listed on the IDX from 2018 to 2021, with company size as the control variable. As an independent variable, researchers used GCG proxied by CGPI, profitability by ROE, solvency by DER, and firm size as control variables.

II. RESEARCH METHOD



This research is a quantitative research because it is based on the research data used, namely numeric data. This research uses secondary data from SWA magazine as well as audited and published financial records for 2018-2021. Secondary data is information that already exists and is utilized by researchers to complete the required data. Financial report data is collected from the IDX web page at www.idx.co.id.

To test the hypothesis that has been mentioned, this study uses multiple regression analysis. This model can be expressed in the equation :

$$Stock\ price = \alpha + \beta_1 GCG + \beta_2 ROE + \beta_3 DER + \beta_4 Firm\ Size + e$$

III. RESULTS AND DISCUSSION

Statistic Descriptive

Table 1. Statistic Descriptive Test Results

	Min	Max	Mean	S.Dev
CGPI	85,3	95,1	90,32	3,16
ROE	0,49	33,14	10,74	8,41
DER	0,42	16,08	5,62	4,22
FS	17	24,96	20,69	2,27
HS	1210	8450	3875	2267

Average value of the 24 samples of GCG data proxied by CGPI is 90. The minimum value of the CGPI variable is 85. 30, namely PT Wijaya Karya Tbk (WIKA) in 2018. Meanwhile, the maximum CGPI value of 95. The average company with a CGPI rating during the 2018 – 2021 period has a high CGPI score of 95. This shows that the company is able to implement good GCG so as to get a high CGPI score. The CGPI value in this study is relatively high because the average CGPI value in this study sample is close to the maximum value. Value 16222 is smaller than the average value indicating that the data used for the CGPI variable has a moderate distribution, indicating that the variable data deviation in this study is very good.

Based on the results of the descriptive statistical tests in the previous table, the profitability variable proxied by Return on Equity (ROE) has a minimum value of 0.49, a maximum value of 33.14, and an average value of 10. Value 41343 is less than the average value, indicating that the distribution of the data variables is minimal, and the research variable data deviations are considered good.

The minimum value or lowest value of DER from all research data is 0.42 which was achieved by PT Bukit Asam Tbk in 2020. Based on this valuation, PT Bukit Asam Tbk will rely more on its own resources than loans in 2020. Meanwhile, the highest value is PT Bank State Savings Account Tbk in 2020 is 16.08. With a standard deviation of 4.22677, the mean DER is 5.6278. The standard deviation of the DER variable is smaller than the average value. This shows that the distribution of variable data is minimal, indicating that the deviation of the research variable data is still good and acceptable.

Based on the previous table, the average natural logarithm of all companies in the total assets of this study is 20.6913. In 2018, PT Bukit Asam Tbk had the lowest total assets of 17.00, while PT Wijaya Karya Tbk had the largest total assets of 24.96 in 2021. The standard deviation of the company size variable is 2.27716 which shows that the natural logarithm of total assets has a deviation limit of 2.27716. Based on this, the standard deviation number which is smaller than the mean value indicates that the variance of the company size variable data in this study is acceptable.

Based on table 4.3 SPSS results for the descriptive statistical test of the dependent variable from 24 samples, the minimum share price of PT Wijaya Karya Tbk in 2021 is 1210, while the maximum value of the share price of PT Bank Negara Indonesia Tbk in 2019 is 8450. The average value of the variable stock price in this study is 3875, with a standard deviation of 2268, which means that the deviation rate of stock price data per year during the year of study is 2268. Because the standard deviation is smaller than the average value in this example, the deviation stock price variable data is considered good.

Classical Assumption Testing

According to Ghozali (2013: 154), the normality test determines whether the confounding or residual variables in the regression model are normally distributed. The regression model is said to be good if the residual values are normal or close to normal (Ningsih & Dukalang, 2019).

	Shapiro-Wilk		
	Stat.	df	Sig
Unstanda-rdized residual	0,946	24	0,216

Table 2. Normality Test Results

Tests were carried out twice because in the first test on normality the significance results were below 0.05, namely 0.039. In the second test, data transformation was carried out so that the fullest normality test was 0.216, so it can be concluded that

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the data already has a normal distribution.

The multicollinearity test determines whether the regression model detects a relationship between the independent variables. If the Tolerance value is greater than 0.1 and the VIF value is greater than 10, the regression model is said to be free from multicollinearity problems.

Variables	Collinearity Statistics	
	Tolerance	VIF
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DER	0,551	1,815
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Table 3. Multicollinearity Test Results

Based on these findings, it was determined that the regression model in this study did not show multicollinearity problems and was suitable for further research.

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The test was carried out twice because the first autocorrelation test obtained a DW value of 0.814. The finding of the DW value 1 > DW = 1,669 > 3 indicates that the regression model has no autocorrelation. In other words, there is no relationship between the confounding variables in the regression model, so it deserves further investigation.

According to Ghozali (2013: 134), the heteroscedasticity test is used to determine whether a regression model has an uneven residual variance from one observation to the next. The Glejser test was used in this study to determine whether there is heteroscedasticity.

Heteroscedasticity	
Variable	Sig.
CGPI	0,832
ROE	0,770
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Table 5. Heteroscedasticity Test Results

The significant value is indicated by the significant value of each variable. > 0.05, it can be said that the regression model in this study is free from the assumption of heteroscedasticity and deserves further investigation.

Multiple Regression Analysis

Multiple linear regression is a regression model that uses more than one independent variable to determine the effect of independent factors on the dependent variable. The regression model of this study is as follows.

$$Stock\ price = \alpha + \beta_1 GCG + \beta_2 ROE + \beta_3 DER + \beta_4 Firm\ Size + e$$

This study shows that the regression model produces an F test value that is equal to 0.047, which means it is significant. The results of this test conclude that GCG, ROE, DER and Firm Size together have a significant effect on stock prices.

In this study, the value of the coefficient of determination (R-Squared) of the regression model used in this research model is 0.295. This means that the variation in the stock price variable can be explained by all variations of the independent variables namely GCG, ROE, DER and Firm Size by 29.5% while the remaining 70.5% is explained by other factors not included in this study.

Discussion of Research Results

1. The Effect of GCG on Stock Prices

The first hypothesis proposes that Good Corporate Governance affects stock prices. The research findings show that the first hypothesis is correct. The T-test value of 0.024 shows this. This figure is less than the significant threshold of 0.05, indicating that GCG has a considerable influence on stock prices. The test results are in line with research conducted by Adinegara & Sukamulja (2021); Nurulrahmatiah & Pratiwi (2020); Suhartono et al. (2018); Syafaatul L (2019). These studies say that GCG has an influence on stock prices. The application of GCG makes company operations much more efficient, and provides opportunities for companies to generate higher profits (Indarti & Extaliyus, 2013).

According to (Adebayo et al. (2014), the use of GCG is the basis for the company's internal management, which can encourage openness of company operations, guarantee accountability, and increase company profitability. The share price will rise as a result of good internal management.

2. The Effect of Profitability on Stock Prices

The second hypothesis says that profitability, as measured by ROE, affects stock prices. Based on the findings of partial hypothesis testing, ROE has a small effect on stock prices. The finding of the T test value of 0.242 shows this. This result is greater than the significance value of 0.05, which means that the ROE variable has no effect on stock prices. Based on the findings of this study, ROE has no effect on stock prices, meaning that the presence or absence of ROE has no effect on stock price levels. The findings of this study are in line with previous research Egam et al. (2017); Odelia & Siregar (2021); Putri (2015), which found that ROE has no effect on stock prices.

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3. The Effect of Solvency on Stock Prices

The third hypothesis formulates that solvency as measured by DER affects stock prices. According to the findings of partial hypothesis testing, DER has little effect on stock prices. The finding of the T test value of 0.671 shows this. This figure is greater than the significance value of 0.05, which means that the DER variable has no effect on stock prices. According to the research findings, solvency as assessed by DER has no effect on stock prices. High solvency is detrimental to company performance. More debt means more interest to pay, which reduces profits and may result in a lower share price.

DER has no effect on stock prices, meaning that the size of the DER value in the company has no effect on the high and low stock prices. This also implies that DER is not the main factor for an investor in investing. The findings of this study are in line with Utami & Darmawan (2018); Wicaksono (2015) who found that DER has little effect on stock prices.

4. The Effect of Company Size on Stock Price

Large and small companies are things that investors pay attention to when investing. Investors will be more interested in large companies that are experiencing good growth (Panjaitan & Muslih, 2019). According to the study's findings, GCG, profitability, and solvency all have an impact on stock prices, with company size as the control variable. While the company's control variable has a significance level of 0.960. These findings indicate that the company's control variables have a small influence on stock prices.

The results of this study are in line with research conducted by Hasanuddin (2020). In his research, Hasanuddin (2020) states that company size has no effect on stock prices. These results indicate that the size of the company, both small and large, will not affect the increase or decrease in stock prices. Company size has no effect on stock prices because investors pay more attention to other good information that can cause stock prices to increase compared to just looking at company size.

IV. CONCLUSION

The purpose of this study was to determine the effect of implementing GCG, profitability, solvency on stock prices with firm size as the control variable. This study tested 6 companies that received CGPI ratings and IDX listings during 2018 – 2021. The total number of final observation data was 24 companies. The CGPI score is used to measure the GCG independent variable in this study. Another independent variable is profitability as measured by ROE and solvency as measured by DER. As a control variable, researchers use firm size.

The results of this study indicate that the H1 hypothesis is accepted, because in this study it was found that the application of corporate governance has an effect on stock prices. The results of this study also show that the H2 hypothesis is rejected, because profitability as measured by ROE has no effect on stock prices. The H3 hypothesis is rejected because it shows that DER as a measure of the solvency ratio has a significant negative effect on stock prices. While the H4 hypothesis cannot be accepted because company size has no effect on stock prices.

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GCG, Profitability And Solvency On Stock Price WithFirm Size As Control Variable

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ABSTRACT

Researchers have a goal to determine the effect of GCG (Good Corporate Governance), profitability, solvency on stock prices with company size as a control variable. This study uses annual report data on companies (secondary data). The population used by the researchers were companies that received CGPI ratings and IDX listings for the 2018 – 2021 period. The samples used by the researchers were 6 companies. The purposive sampling method was used by researchers to obtain the sample. Researchers tested the data with the SPSS 23 program. Researchers used multiple linear regression methods in their tests. This study shows the simultaneous results that GCG, profitability, solvency and company size affect the stock price of the company. Partially this study shows the results that profitability, solvency and company size do not affect stock prices, while GCG (Good Corporate Governance) has an effect on company stock prices.

Keywords : Good Corporate Governance, profitability, solvency, company size, stock price.

I. INTRODUCTION

The GCG concept was first launched in Indonesia by the Indonesian government and the International Monetary Fund (IMF) during the post-crisis economic recovery period of 1997-1998. During this period the crisis had a major impact, namely many companies went into liquidation, forcing the government to restructure and recapitulate.

GCG is included in efforts to resolve stakeholder conflicts and ensure that the company is managed effectively. This is related to agency theory which divides the correlation between owner and management. Agency conflicts arise as a result of the separation of interests between owners and management. Agency conflicts can arise when managers and shareholders have competing needs and objectives, namely as agent and principal. In other words, GCG can aim to regulate and prevent problems within the company (Situmorang & Simanjuntak, 2019). Wahyudin & Solikhah (2017) also stated that the implementation of GCG is required by stakeholders because it has a positive impact in the long term.

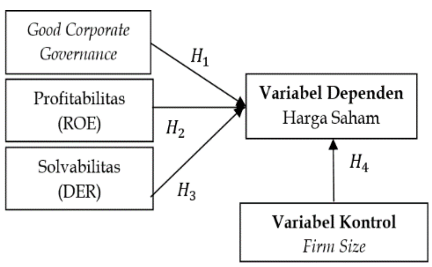
According to Safitri & Mukaram (2018), ROE is an important statistic for shareholders because it measures the rate of return on shareholder investment in a company. Companies that have high ROE may be more successful in running and managing capital to achieve large profits (Levina & Dermawan, 2019).

The Solvency Ratio is associated with funding decisions where corporations prefer debt financing over their own capital (Darmawan, 2020: 73). The solvency or leverage ratio is the ratio used to calculate the amount of debt a company must pay to fulfill its assets (Levina & Dermawan, 2019). The higher the loan interest rate that must be absorbed by the company, the greater the debt used to fund the company's assets. The smaller the DER ratio, the smaller the company's liquidity risk (Ramadhan & Nursito, 2021).

According to Nurulrahmatiah & Pratiwi (2020), the company's performance is directly related to the level of income which in turn affects the level of the company's stock price. According to his findings, GCG has a significant and beneficial effect on stock prices. The stronger the company's financial performance, the more attractive investors will be to buy the company's shares resulting in an increase in the purchase and price of the company's shares. It can be concluded that GCG has an impact on stock prices.

Based on this research background, researchers will conduct research on the effect of GCG, profitability, and solvency on stock prices in companies that obtain CGPI ratings and are listed on the IDX from 2018 to 2021, with company size as the control variable. As an independent variable, researchers used GCG proxied by CGPI, profitability by ROE, solvency by DER, and firm size as control variables.

II. RESEARCH METHOD



This research is a quantitative research because it is based on the research data used, namely numeric data. This research uses secondary data from SWA magazine as well as audited and published financial records for 2018-2021. Secondary data is information that already exists and is utilized by researchers to complete the required data. Financial report data is collected from the IDX web page at www.idx.co.id.

To test the hypothesis that has been mentioned, this study uses multiple regression analysis. This model can be expressed in the equation :

$$Stock\ price = \alpha + \beta_1 GCG + \beta_2 ROE + \beta_3 DER + \beta_4 Firm\ Size + e$$

III. RESULTS AND DISCUSSION

Statistic Descriptive

Table 1. Statistic Descriptive Test Results

	Min	Max	Mean	S.Dev
CGPI	85,3	95,1	90,32	3,16
ROE	0,49	33,14	10,74	8,41
DER	0,42	16,08	5,62	4,22
FS	17	24,96	20,69	2,27
HS	1210	8450	3875	2267

Average value of the 24 samples of GCG data proxied by CGPI is 90. The minimum value of the CGPI variable is 85. 30, namely PT Wijaya Karya Tbk (WIKA) in 2018. Meanwhile, the maximum CGPI value of 95. The average company with a CGPI rating during the 2018 – 2021 period has a high CGPI score of 95. This shows that the company is able to implement good GCG so as to get a high CGPI score. The CGPI value in this study is relatively high because the average CGPI value in this study sample is close to the maximum value. Value 16222 is smaller than the average value indicating that the data used for the CGPI variable has a moderate distribution, indicating that the variable data deviation in this study is very good.

Based on the results of the descriptive statistical tests in the previous table, the profitability variable proxied by Return on Equity (ROE) has a minimum value of 0.49, a maximum value of 33.14, and an average value of 10. Value 41343 is less than the average value, indicating that the distribution of the data variables is minimal, and the research variable data deviations are considered good.

The minimum value or lowest value of DER from all research data is 0.42 which was achieved by PT Bukit Asam Tbk in 2020. Based on this valuation, PT Bukit Asam Tbk will rely more on its own resources than loans in 2020. Meanwhile, the highest value is PT Bank State Savings Account Tbk in 2020 is 16.08. With a standard deviation of 4.22677, the mean DER is 5.6278. The standard deviation of the DER variable is smaller than the average value. This shows that the distribution of variable data is minimal, indicating that the deviation of the research variable data is still good and acceptable.

Based on the previous table, the average natural logarithm of all companies in the total assets of this study is 20.6913. In 2018, PT Bukit Asam Tbk had the lowest total assets of 17.00, while PT Wijaya Karya Tbk had the largest total assets of 24.96 in 2021. The standard deviation of the company size variable is 2.27716 which shows that the natural logarithm of total assets has a deviation limit of 2.27716. Based on this, the standard deviation number which is smaller than the mean value indicates that the variance of the company size variable data in this study is acceptable.

Based on table 4.3 SPSS results for the descriptive statistical test of the dependent variable from 24 samples, the minimum share price of PT Wijaya Karya Tbk in 2021 is 1210, while the maximum value of the share price of PT Bank Negara Indonesia Tbk in 2019 is 8450. The average value of the variable stock price in this study is 3875, with a standard deviation of 2268, which means that the deviation rate of stock price data per year during the year of study is 2268. Because the standard deviation is smaller than the average value in this example, the deviation stock price variable data is considered good.

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The results of this study are in line with research conducted by Hasanuddin (2020). In his research, Hasanuddin (2020) states that company size has no effect on stock prices. These results indicate that the size of the company, both small and large, will not affect the increase or decrease in stock prices. Company size has no effect on stock prices because investors pay more attention to other good information that can cause stock prices to increase compared to just looking at company size.

IV. CONCLUSION

The purpose of this study was to determine the effect of implementing GCG, profitability, solvency on stock prices with firm size as the control variable. This study tested 6 companies that received CGPI ratings and IDX listings during 2018 – 2021. The total number of final observation data was 24 companies. The CGPI score is used to measure the GCG independent variable in this study. Another independent variable is profitability as measured by ROE and solvency as measured by DER. As a control variable, researchers use firm size.

The results of this study indicate that the H1 hypothesis is accepted, because in this study it was found that the application of corporate governance has an effect on stock prices. The results of this study also show that the H2 hypothesis is rejected, because profitability as measured by ROE has no effect on stock prices. The H3 hypothesis is rejected because it shows that DER as a measure of the solvency ratio has a significant negative effect on stock prices. While the H4 hypothesis cannot be accepted because company size has no effect on stock prices.

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The Mediation Role Of Financial Performance On The Relationship Between Good Corporate Governance (GCG) And Corporate Values (Studies On Manufacturing Companies Listed On The IDX In 2019 - 2021)

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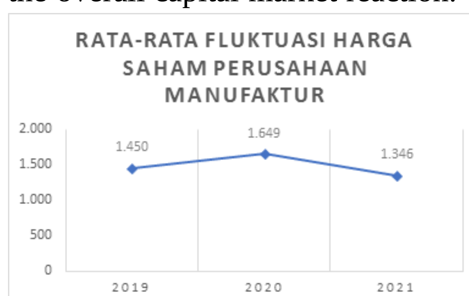
ABSTRACT

This study aims to determine the mediating role of financial performance in the relationship between good corporate governance and corporate value. The type of data used is quantitative data sourced from secondary data through IDX data. The population in this study were 72 companies. The sampling technique used purposive sampling. Data is analyzed using SEM and processed through WarPLS. The results showed that good corporate governance with proxies of managerial ownership, institutional ownership, and audit committees had no effect on firm value, while an independent board of commissioners had a positive effect on firm value. Financial performance has no effect on firm value, the mediation results show that financial performance has not been able to mediate good corporate governance on firm value, this is because the company has not optimally formed good corporate governance so it is difficult to increase profits and firm value.

Keywords : financial performance; firm value; good corporate governance

I. INTRODUCTION

Company value is the efficiency achieved during the company's operations (Noerirawan &; Muid, 2012). The increasing value of the company is a concern for investors. So, the purpose of company value is to maximize profits so that investors can glance at it (Yuono, 2016). Indonesia has a strategic market in the world of investment, especially in manufacturing companies. Manufacturing companies need internal and external funding sources to expand their activities. The author chooses manufacturing companies to be the object of research because manufacturing companies listed on the IDX consist of several industrial subsectors so that they can describe the overall capital market reaction.



Source : Processed by the author in 2023 (finance.yahoo.com)
Figure1 Graph of the average share price development of manufacturing companies

Figure 1 above explains that there were fluctuations from 2019 – 2021. In 2019 - 2020 On average, stock prices have increased. Therefore, there is a need for policies carried out by each manufacturing company to increase the value of stock prices.

Food and beverage companies are companies engaged in the food and beverage industry. The author chose the food and beverage subsector because the stock is a stock that can survive when hit by a monetary crisis compared to other sectors, because under any conditions food and beverage products are still needed by the community

Reporting from the Kontan.co.id-Jakarta page (2021), the manufacturing company of the food and beverage subsector is PT. Tiga Pilar Sejahtera Food Tbk (AISA) experienced problems related to the implementation of Good Corporate Governance (GCG). Public accounting firm Ernst & Young (EY) has published an audit of possible violations by AISA's legacy management. From this case, GCG should be implemented based on its principles, especially the application of guidelines and mechanisms in ensuring good behavior.

In addition to GCG related to company value, there needs to be external factors so that the company can survive in the era of globalization, according to Siregar & Rahayu (2017) among these internal factors is the company's financial performance that can improve management in order to continue to increase the effectiveness and efficiency of work or expand in order to maximize market share that has potential and get company value. The increase in company value includes the achievement of a company's financial performance which can be called getting better (Wijaya &; Linawati, 2015).

In addition to the phenomenon, the reason for researchers is strengthened by the research gap that occurred in previous studies. The searchgap found by researchers in Harefa's research (2015) is in line with Sukrin's (2020) research, explaining that GCG does not have a significant negative effect on company value. In contrast to research from Girindratama (2019), GCG has a significant positive effect on company value. Further results related to financial performance found that financial performance had a significant positive effect on the company's value stated by Harefa (2015), Sukirin (2020) and Girindratama (2019).(GIRINDRATAMA, 2019) On the other hand, research by Rina (2014) financial performance has no effect on company value (significant negative effect). Judging from the explanation above, so it must see the influence of the implementation of the company's GCG on the value of the company through financial performance.

II. RESEARCH METHOD

This research is of quantitative type. Sugiyono (2019) defines quantitative research as a form of scientific research that investigates a problem from existing phenomena, this research is based on positivistic. The data source used is secondary data. According to Sugiyono (2017: 309), secondary data is indirect data, obtained through documents. The source of data in this study was obtained from the company's annual report on the IDX website for 2019 – 2021. According to Arikunto (2013), population is all research subjects. In this study, the population used is all manufacturing companies listed in the food and beverage stock market subsector on the IDX. The selection of this index consists of 72 companies. Sampling through purposive sampling method so that 14 samples were obtained. Data collection is carried out through the use of documentation techniques, namely in the form of annual report data for each company through www.idx.com and the website of each company. The analysis in this study used WarpPLS.

III. RESULTS AND DISCUSSION

This study examines the effect of changes in company value on the existence of Good Corporate Governance with financial performance as mediation. The dependent variable in this study is the value of the company proxied using Tobins's Q, while the independent variable is GCG which is proxied using managerial ownership, institutional ownership, audit committee, and independent board of commissioners, as well as the mediating variable, namely financial performance proxied with ROA. The study produced 9 hypotheses.

a. The influence of managerial ownership on the value of manufacturing companies

Based on the hypothesis test, managerial ownership does not affect the value of the company, so H1 is rejected. This is because the average proportion of managerial ownership is low, the lack of percentage of human ownership causes management to be unable to actively participate in decision making. Another factor is that the high and low value of the company is not influenced by the amount of management share ownership but can be influenced by management's ability to manage (Astutik, 2021). This result is in line with research (Saputri &; Isbanah, 2021), (Astutik, 2021), and (Rahman &; Asyik, 2021)(Rahman & Asyik, 2021) suggesting that managerial ownership does not affect company value. The acquisition of this discussion is not in line with agency theory which states that management share ownership can reduce conflicts that occur in the company, this is because management share ownership can reduce agency problems because it can balance various existing interests (Astutik, 2021).

b. The effect of institutional ownership on the value of manufacturing firms

Based on the hypothesis test, institutional ownership does not affect the value of the company, so H2 is rejected. The value of the company is not influenced by any institutional ownership, this can be said because there is an information asymmetry, investors do not necessarily all have the same information as managers, so managers are difficult to control (Rahman &; Asyik, 2021). This achievement supports research (Saputri &; Isbanah, 2021) and (Rahman &; Asyik, 2021).

This acquisition rejects agency theory, which states that institutional ownership can reduce agency costs so as to increase the value of the company. This can happen because the institutional party is still unable to maximally control the performance of the management, so that the management can carry out decisions prioritizing personal interests and ignoring the impact on company value (Saputri &; Isbanah, 2021).

c. The effect of the audit committee on the value of manufacturing companies

From the calculations, the audit committee does not affect the value of the company so that H3 is rejected. The value of the company is not influenced by the number of the company's audit committee, this can happen because the number of audit committee meetings does not show the influence of the quality of the meeting so that it does not affect the value of the company (Setiono &; Wijaya, 2022). This acquisition supports research (Rahmawati, 2022) and (Setiono &; Wijaya, 2022).

This achievement is not in line with agency theory which suggests that the audit committee can solve agency problems, because it does not function to control internal well, and the number of audit committee members is minimal (Rahmawati, 2022).

d. The influence of the independent board of commissioners on the value of manufacturing companies

From the hypothesis test, the independent board of commissioners influences the value of the company so that H4 is accepted. This matter shows that the higher percentage of the independent board of commissioners, the higher the value of the company. This phenomenon occurs because the independent board of commissioners of sample companies can carry out supervisory functions in order to control the policies and activities carried out by the directors and result in an increase in company value (Muryati &; Suardikha, 2014). This achievement supports research (Muryati &; Suardikha, 2014) and (Rahmawati, 2021).

This acquisition is in line with agency theory which states that "the independent board of commissioners is considered to be the highest internal control mechanism responsible for overseeing top management policies", the agency theory suggests that the large number of independent board of commissioners members can make it easier to control top management and improve the supervisory function so that company value increases (Rahmawati, 2021).

e. The effect of financial performance on the value of manufacturing companies

From the acquisition of the hypothesis, financial performance does not affect the value of manufacturing companies. This gain is not in line with signaling theory which suggests that increasing profitability describes the company's ability to get more profits, which will result in investors being interested in buying company shares (Astutik, 2021). This can happen because management performance is unable to use its assets, resulting in decreased net profit while company assets increase (Andika et al., 2021). The acquisition of this research supports the research (Andika et al., 2021).

f. The role of financial performance as a mediation on the influence of managerial ownership on the value of manufacturing companies

From the acquisition of hypotheses, financial performance has not been able to mediate managerial ownership with company value. This acquisition is not in accordance with agency theory which states that management ownership can suppress agency conflicts and have an impact on company profits (Astutik, 2021). This happens because the percentage of management share ownership is very small, so agency problems can arise because management is not included in the majority of company shareholders (Saputri &; Isbanah, 2021). The acquisition of this research supports research (Astutik, 2021), (Saputri &; Isbanah, 2021), (Rahman &; Asyik, 2021), and (Setiono &; Wijaya, 2022).(Setiono & Wijaya, 2022)

g. The role of financial performance as a mediation on the influence of institutional ownership on the value of manufacturing firms

Based on the hypothesis test, financial performance has not been able to mediate institutional ownership with company value. This acquisition is not in line with agency theory, that institutional shareholding can oversee management work so as to reduce agency conflicts and impact on the company. This can happen because company owners cannot interact directly for the company, only relying on financial statements so that the data owned is only a little compared to managers. This hinders the company from achieving its goals (Saputri &; Isbanah, 2021). These results are in line with research

(Rahman &; Asyik, 2021) and (Saputri &; Isbanah, 2021).

h. The role of financial performance as a mediation on the influence of the audit committee on the value of manufacturing companies

Based on the hypothesis test, financial performance has not been able to mediate the audit committee with the value of the company. This acquisition is not in line with agency theory, the audit committee is needed to overcome the shortcomings run by the management. This happens because the audit committee has not been able to guarantee the effectiveness of the audit committee's performance when controlling financial performance, because the audit committee does not just carry out company financial control but carries out control in the non-financial field and runs meetings in order to maintain its image in front of investors (Saputri &; Isbanah, 2021). These results are in line with research (Saputri &; Isbanah, 2021) and (Setiono &; Wijaya, 2022).

i. The role of financial performance as a mediation on the influence of the independent board of commissioners on the value of manufacturing companies

Financial performance has not been able to mediate the independent board of commissioners on the value of manufacturing companies. This acquisition does not support agency theory, stating that the independent board of commissioners can handle agency issues because the supervisory role carried out is more objective in managing management related to company profits. This happens because the independent board of commissioners are board members who come from outside the company so that there is limited knowledge about the company, this causes ineffective supervision carried out on the management of the company (Astutik, 2021). These results are in line with research (Saputri &; Isbanah, 2021), ((Saputri & Isbanah, 2021)Rahman &; Asyik, 2021) and (Astutik, 2021).

IV. CONCLUSION

The purpose of this study is to examine the mediating role of financial performance in the relationship between GCG and company value in food and beverage subsector manufacturing companies listed on the IDX in 2019 – 2021. The acquisition of the hypothesis test shows the results that "managerial ownership, institutional ownership, and audit committee do not affect company value, while the results of the independent board of commissioners have a positive effect on company value", this happens because the independent board of commissioners can supervise in supervising company policies and activities carried out by the board of directors optimally so that it has an impact on company value. Financial performance does not affect the value of the company. The acquisition of mediation suggests that financial performance has not been able to mediate GCG, this is because the company has not maximally created good company management so that it is always contrary to agency theory which causes companies difficulty in adding value.

The practical implication for companies should be to be able to pay attention to the proportion of independent board of commissioners being a component in taking investment, because these factors can positively affect the value of the company where an increase in the percentage of independent board of commissioners will affect the increase in company value. It is expected that the next researcher can add or use different proxies of Good Corporate Governance such as: board of directors, family ownership and profit quality.

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The Influence Of Good Corporate Governance, Corporate Social Responsibility And Financial Performance On The Value Of Lq45 Companies Listed On The Indonesia Stock Exchange

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ABSTRACT

This study aims to prove the influence of Good Corporate Governance as measured by the Independent Board of Commissioners, Institutional Ownership, Managerial Ownership, and audit committee size, Corporate Social Responsibility and financial performance as measured by return on assets and return on equity on LQ45 firm value. This study uses secondary data in financial, annual and sustainability reports. The sampling used a purposive sampling technique, resulting in 87 LQ45 company data. Analysis of the data used in the research is multiple linear regression analysis. The result shows that the board of independent commissioners, managerial ownership, corporate social responsibility, return on equity do not influence LQ45 firm value. Institutional ownership has a negative influence on LQ45 company value, and returns on assets have a positive impact on LQ45's company value.

Keywords : Corporate Social Responsibility; Financial Performance; Firm Value; Good Corporate Governance

I. INTRODUCTION

Increasing the value of companies with long time vulnerability is the ideal of every company with the best effort (Mukhtaruddin et al., 2014). Stock prices can reflect an increase in company value (Mukhtaruddin et al., 2014). Stock market movements will always be observed by investors through the Indonesia Stock Exchange (Mukhtaruddin et al., 2014). Investors have a benchmark to see the state of a company using stock prices (Rosmita, 2019). One of the factors that influence investors' decisions to invest their funds is the condition of the company (Rosmita, 2019). Investors measure stock movements with predetermined criteria using stock indices and also for comparison indicators between stocks (Putra et al., 2019). Of the various stock indices, JCI (Composite Stock Price Index) and LQ45 (Liquidity 45) are often used among investors (Putra et al., 2019). Here are the movements of the 2019-2021 LQ45 stock.

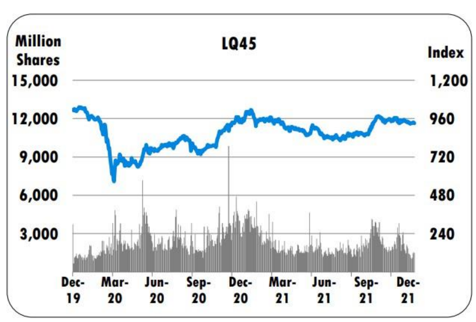

Figure 1 stock movement 2019-2021

Source: idx.co.id

Judging from figure 1.1, at the end of 2019 the LQ45 share price was at the level of 1022.72. In 2020, the LQ45 stock index experienced a decline in stock price where in March 2020 it was at the level of 934.89. Then at the end of 2021, the LQ45 stock index fell again with the stock price at 931.41. The decline in stock price occurred due to 2 factors, namely internal or external. Internal problems occur due to agency problems, such as differences in information, opportunistic actions, or lack of transparency. Based on agency theory, agency problems can be prevented by corporate governance. External problems occur because they occur outside the company such as the coronavirus outbreak. This outbreak occurred in 2020, where the outbreak affected the finances of several companies. This can be prevented if the company implements good corporate governance because the company's finances will be maintained.

Shareholders will continue to invest funds in companies based on company records that have high stock numbers, because shareholders want

research revealed that the CSR reports in the company's reports were not used by investors. In addition to GCG and CSR, companies do not forget to provide information about financial performance (Hidayat

their prosperity to be guaranteed (Puspasari &; Sujana, 2021). One of the important things for shareholders is information, because information is the key to investing in a company. Information that can be presented by the Company is related to corporate governance, social responsibility, and financial performance (Puspasari &; Sujana, 2021).

Based on research by Hidayat et al. (2021), company value is positively influenced by GCG. Different findings were obtained with Raksono & Wirjawan (2019) with the results of GCG research not affecting company value. According to Raksono & Wirjawan (2019), companies that implement Good Corporate Governance may not have an internal overhaul of the agency. Corporate Social Responsibility affects the value of the company. Based on research by Putra et al. (2019), increasing company value can be increased by loyalty from consumers. With high loyalty, the company's profit level will be good and the company will be more famous, this can be realized by including CSR reports in the annual report. Unlike the research of Hidayat et al. (2021), CSR does not affect company value. The results of his

et al., 2021). Based on Sari & Asyik (2018) and Fiadicha &; Hanny (2018) which suggest the use of ROA and ROE in measuring financial performance positively affects company value. In contrast to the opinions of Fika & Rahmawati (2020) and Asyik & Thaharah (2016), getting the results of using ROA and ROE in measurement does not affect the company's value. Fika &; Rahmawati (2020) stated that the value of a company that is not influenced by financial performance is due to securities market rules that do not work properly because the securities market is still developing. Based on the results of previous studies that are still inconsistent between the relationship of independent variables and dependent variables and based on the explanation above, researchers have a goal to explore with the title influence of good corporate governance, corporate social responsibility and performance of corporate value LQ45.

II. RESEARCH METHOD

Types of Research and Overview of the Population (Object) of Researchs

The researcher uses quantitative types in his study methods. Sugiyono (2022:7) wrote that quantitative methods are called positivistic because their foundation is based on positivistic philosophy. The quantitative approach is also called the scientific approach because it meets scientific principles: objective, measurable, rational, systematic, and replicable.

Purposive sampling is chosen by researchers to be used in retrieving data needed by researchers. Sampling using criteria set by researchers is called Purposive sampling Sugiyono (2022:81). The sample criteria are LQ45 Companies listed on the Indonesia Stock Exchange, Companies listed on the LQ45 stock index consecutively for the 2019-2021 period, LQ45 Companies that report consecutive sustainability reports for the 2019-2021 period.

III. RESULTS AND DISCUSSION

Table 1 Variable and Measurement

Variable	Measurement
Company Value (Y)	$Q = \frac{(EMV + D)}{(EBV + D)}$
Independent Board of Commissioners (X1)	$\frac{\text{Member of Independent Comissaris}}{\text{Total Member of Commisaris}}$
Institutional Ownership (X2)	$\frac{\text{The Number of Share Owned by the Institution}}{\text{Total Outstanding Share Capital of the Company}}$
Managerial Ownership (X3)	$\frac{\text{The Number of Share Owned by the Management}}{\text{Total Outstanding Share Capital of the Company}}$
Audit Committee Size (X4)	Number of audit committee members
Corporate Social Responsibility (X5)	$\frac{\sum Xy_i}{n_i}$
Return On Asset (X6)	$\frac{\text{Net Income}}{\text{total Assets}}$
Return On Equity (X7)	$\frac{\text{Net Income}}{\text{total Equity}}$

Source: Scientific Articles

Descriptive Statistics

The results of descriptive statistical analysis are presented in the table below.

Table 2 The results of descriptive statistical

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev
IBC	87	,29	,83	,44	,12
IO	87	,12	,95	,62	,13
MO	87	,00	,06	,00	,011
ACS	87	3,00	8,00	3,94	1,34
CSR	87	,15	,64	,42	,11
ROA	87	-,03	,36	,07	,078
ROE	87	-,07	1,45	,15	,24
CV	87	,73	5,10	1,47	,90

Source: SPSS Output

Classical Assumption Test

Normality Test

The results of the normality test, in this study using the Kolmogorov-Smirnov test with the sqrt (square root) transformation, indicating that the data are normally distributed, with asymp. sig. 0.200 exceeds the minimum normal data of 0.05.

Multicolonearity Test

The result of multicolonearity test in this study are not symptoms of muccolicollinearity in all variables, because there is no high correlation of numbers from each independent variable.

Heteroscedasticity Test

In this study indicated no symptoms of heteroscedasticity. This is because data points do not gather in the middle, the spread is at the top and bottom around 0, and no particular pattern formation is found. The following is a picture of the results of the heteroscedasticity test:

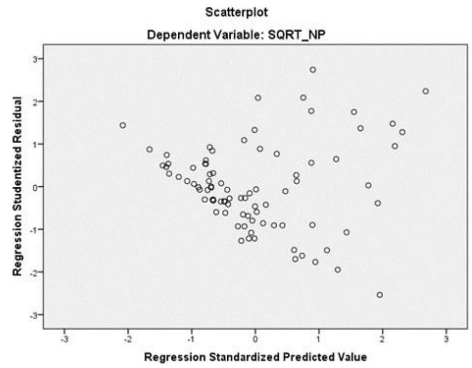

Figure 2 heteroscedasticity test results
Source: Output SPSS

Test Autocorrelation

The results of the autocorrelation test with the Durbin Watson test indicate no symptoms of autocorrelation because the DW value of 1.955 was greater than the DU of 1.828 and the DW value of 1.955 was less than 4–1.828.

Multiple Linear Regression Analysis

The results of multiple linear equations show that the independent variable and the dependent variable influence each other. The form of the equation from the results of multiple linear regression analysis is as follows:

NP= 0.83 + 0.33 DKI – 0.47 KI – 0.70 KM + 0.01 UKA + 0.16 CSR + 1.83 ROA – 0.39 ROE

Test the hypothesis

Simultan Test (f Test)

Table 1 Simultan Test Result

Type		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4,67	7	,66	13,63	,000b
	Residuals	3,82	78	,04		
	Total	8,50	85			

Source: SPSS Output

Because the sig value does not exceed 0.05, the simultaneous test results show that the sig level of0.00 indicates that the independent variable has a significant influence simultaneously on the dependent variable

Coefficient of Determination Test (R^2)

Table 2 Test results for the coefficient of determination

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742[a]	,55	,51	,22

Source: SPSS Output

Based on the test, the independent variable affects the dependent variable by 51% simultaneously, as shown by the Adjusted figure of 0.510.

Partial Test (t Test)

The results of partial test are presented in the table below:

Table 3 The results of partial test

Type		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,84	,33		2,52	,01
	IBC	,33	,39	,092	,84	,40
	IO	-,47	,19	-,215	-2,44	,01
	MO	-,70	,53	-,106	-1,31	,19
	ACS	,01	,09	,013	,15	,87
	CSR	,16	,18	,072	,86	,39
	ROA	1,83	,40	,802	4,48	,00
	ROE	-,39	,29	-,250	-1,33	,18

Source: SPSS Output

Discussion

The Effect of Independent Board of Commissioners' Independence on LQ45 Corporate Value

According to the results of the study, the value of the LQ45 company is not influenced by an independent board of commissioners, so the first hypothesis is rejected. With these results, it proves that in the LQ45 company, the existence of an independent board of commissioners has not been effective enough in monitoring the management of the company. The results of this study are not in accordance with the institution's theory that the independent board of commissioners can reduce the institution's problems because the existence of independent commissioners can balance the power of managers through supervisory mechanisms.

The Effect of Institutional Ownership on LQ45 Corporate Value

The second hypothesis was rejected after it was proven that institutional ownership negatively affects the value of the company. With that, it shows that greater ownership will reduce the value of the company. Based on agency theory which says that the higher institutional ownership, the more effective in supervision to reduce agency conflicts and increase company value because institutional ownership is one of the corporate governance mechanisms to suppress agency conflicts. In this study it does not fit the agency's theory because high ownership in LQ45 companies lowers the value of the company.

The Effect of Managerial Ownership on LQ45 Company Value

The results showed that managerial ownership did not affect the value of the company, so the third hypothesis was rejected. Based on agency theory, differences in management and shareholder interests result in agency conflicts that can be prevented by supervisory mechanisms. The supervisory mechanism for these managers results in agency costs, where agency costs can be minimized by managerial shareholding. Based on the results of the study, it is evident that the agency theory is not in accordance with this study. High or low managerial ownership in LQ45 companies does not affect the increase or decrease in company value.

The Effect of Audit Committee Size on LQ45 Company Value

The study's findings showed the size of the audit committee had no impact on the value of the company, which led to the fourth hypothesis being rejected. Based on agency theory, the audit committee can reduce agency problems by optimizing supervision, especially in delivering information to shareholders. Based on the results of the study, it proves that this research is not in accordance with agency theory because the increasing number or low number of audit committee members has no effect in increasing or decreasing the value of the company.

The Effect of Corporate Social Responbility on LQ45 Corporate Value

Corporate social responsibility (CSR) has no impact on the value of LQ45 companies. Thus, the fourth hypothesis was rejected. Based on agency theory, companies that report or disclose CSR have a goal to build a good corporate image so that agency fees arise. Companies that face agency fees tend to incur costs that can improve the reputation of the company by conducting corporate environmental disclosure as a CSR action which is a signal given to shareholders. The results of this corporate environmental disclosure can increase stock prices in the capital market and increase shareholder confidence so that the company's value can increase. Based on the results of the study, it proves that this research is not in accordance with the agency's theory.

The Effect of Return On Assets on Company Value LQ45

The results showed that Return On Asset (ROA) has a positive effect on the value of the company. Thus, the sixth hypothesis is acceptable. Based on the agency theory through the bonus plan hypothesis, managers will strive to increase the profitability of the company, because higher profitability will increase the returns received by shareholders. The results of this study are in accordance with the agency's theory because a high ROA value indicates that the performance of the LQ45 company is getting better, due to the large rate of return. This gives a positive signal to investors, so investors are interested in investing their capital.

The Effect of Return On Equity on Company Value LQ45

The study showed the seventh hypothesis was rejected because Return On Equtity (ROE) had no impact on the value of LQ45 companies. Agency theory through the bonus plan hypothesis, managers will strive to increase the profitability of the company, because higher profitability will increase the return received by shareholders. Based on the results of the study, the agency theory is not in accordance with this study because the high and low ROE does not affect the value of the LQ45 company. This research is also not in accordance with signal theory because ROE cannot provide positive or negative signals to investors.

IV. CONCLUTION

The results of this study show that the independent board of commissioners, ownership of managers, size of audit committee, corporate social responsibility, and return on equity do not affect the value of LQ45 companies. Then institutional ownership negatively affects the value of the company. Return on assets (ROA) determines the value of the company, the greater the potential profit of assets, the more efficient the rotation of assets because the higher the profitability obtained by the company so that return on assets affects the value of the company.

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The Mediation Role Of Financial Performance On The Relationship Between Good Corporate Governance (GCG) And Corporate Values (Studies On Manufacturing Companies Listed On The IDX In 2019 - 2021)

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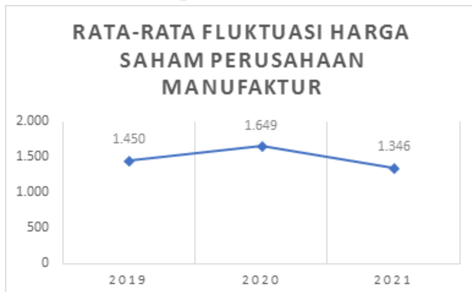
ABSTRACT

This study aims to determine the mediating role of financial performance in the relationship between good corporate governance and corporate value. The type of data used is quantitative data sourced from secondary data through IDX data. The population in this study were 72 companies. The sampling technique used purposive sampling. Data is analyzed using SEM and processed through WarPLS. The results showed that good corporate governance with proxies of managerial ownership, institutional ownership, and audit committees had no effect on firm value, while an independent board of commissioners had a positive effect on firm value. Financial performance has no effect on firm value, the mediation results show that financial performance has not been able to mediate good corporate governance on firm value, this is because the company has not optimally formed good corporate governance so it is difficult to increase profits and firm value.

Keywords : financial performance; firm value; good corporate governance

I. INTRODUCTION

Company value is the efficiency achieved during the company's operations (Noerirawan &; Muid, 2012). The increasing value of the company is a concern for investors. So, the purpose of company value is to maximize profits so that investors can glance at it (Yuono, 2016). Indonesia has a strategic market in the world of investment, especially in manufacturing companies. Manufacturing companies need internal and external funding sources to expand their activities. The author chooses manufacturing companies to be the object of research because manufacturing companies listed on the IDX consist of several industrial subsectors so that they can describe the overall capital market reaction.



Source : Processed by the author in 2023 (finance.yahoo.com)
Figure1 Graph of the average share price development of manufacturing companies

Figure 1 above explains that there were fluctuations from 2019 – 2021. In 2019 - 2020 On average, stock prices have increased. Therefore, there is a need for policies carried out by each manufacturing company to increase the value of stock prices.

Food and beverage companies are companies engaged in the food and beverage industry. The author chose the food and beverage subsector because the stock is a stock that can survive when hit by a monetary crisis compared to other sectors, because under any conditions food and beverage products are still needed by the community

Reporting from the Kontan.co.id-Jakarta page (2021), the manufacturing company of the food and beverage subsector is PT. Tiga Pilar Sejahtera Food Tbk (AISA) experienced problems related to the implementation of Good Corporate Governance (GCG). Public accounting firm Ernst & Young (EY) has published an audit of possible violations by AISA's legacy management. From this case, GCG should be implemented based on its principles, especially the application of guidelines and mechanisms in ensuring good behavior.

In addition to GCG related to company value, there needs to be external factors so that the company can survive in the era of globalization, according to Siregar & Rahayu (2017) among these internal factors is the company's financial performance that can improve management in order to continue to increase the effectiveness and efficiency of work or expand in order to maximize market share that has potential and get company value. The increase in company value includes the achievement of a company's financial performance which can be called getting better (Wijaya &; Linawati, 2015).

In addition to the phenomenon, the reason for researchers is strengthened by the research gap that occurred in previous studies. The searchgap found by researchers in Harefa's research (2015) is in line with Sukrin's (2020) research, explaining that GCG does not have a significant negative effect on company value. In contrast to research from Girindratama (2019), GCG has a significant positive effect on company value. Further results related to financial performance found that financial performance had a significant positive effect on the company's value stated by Harefa (2015), Sukirin (2020) and Girindratama (2019).(GIRINDRATAMA, 2019) On the other hand, research by Rina (2014) financial performance has no effect on company value (significant negative effect). Judging from the explanation above, so it must see the influence of the implementation of the company's GCG on the value of the company through financial performance.

II. RESEARCH METHOD

This research is of quantitative type. Sugiyono (2019) defines quantitative research as a form of scientific research that investigates a problem from existing phenomena, this research is based on positivistic. The data source used is secondary data. According to Sugiyono (2017: 309), secondary data is indirect data, obtained through documents. The source of data in this study was obtained from the company's annual report on the IDX website for 2019 – 2021. According to Arikunto (2013), population is all research subjects. In this study, the population used is all manufacturing companies listed in the food and beverage stock market subsector on the IDX. The selection of this index consists of 72 companies. Sampling through purposive sampling method so that 14 samples were obtained. Data collection is carried out through the use of documentation techniques, namely in the form of annual report data for each company through www.idx.com and the website of each company. The analysis in this study used WarpPLS.

III. RESULTS AND DISCUSSION

This study examines the effect of changes in company value on the existence of Good Corporate Governance with financial performance as mediation. The dependent variable in this study is the value of the company proxied using Tobins's Q, while the independent variable is GCG which is proxied using managerial ownership, institutional ownership, audit committee, and independent board of commissioners, as well as the mediating variable, namely financial performance proxied with ROA. The study produced 9 hypotheses.

a. The influence of managerial ownership on the value of manufacturing companies

Based on the hypothesis test, managerial ownership does not affect the value of the company, so H1 is rejected. This is because the average proportion of managerial ownership is low, the lack of percentage of human ownership causes management to be unable to actively participate in decision making. Another factor is that the high and low value of the company is not influenced by the amount of management share ownership but can be influenced by management's ability to manage (Astutik, 2021). This result is in line with research (Saputri &; Isbanah, 2021), (Astutik, 2021), and (Rahman &; Asyik, 2021)(Rahman & Asyik, 2021) suggesting that managerial ownership does not affect company value. The acquisition of this discussion is not in line with agency theory which states that management share ownership can reduce conflicts that occur in the company, this is because management share ownership can reduce agency problems because it can balance various existing interests (Astutik, 2021).

b. The effect of institutional ownership on the value of manufacturing firms

Based on the hypothesis test, institutional ownership does not affect the value of the company, so H2 is rejected. The value of the company is not influenced by any institutional ownership, this can be said because there is an information asymmetry, investors do not necessarily all have the same information as managers, so managers are difficult to control (Rahman &; Asyik, 2021). This achievement supports research (Saputri &; Isbanah, 2021) and (Rahman &; Asyik, 2021).

This acquisition rejects agency theory, which states that institutional ownership can reduce agency costs so as to increase the value of the company. This can happen because the institutional party is still unable to maximally control the performance of the management, so that the management can carry out decisions prioritizing personal interests and ignoring the impact on company value (Saputri &; Isbanah, 2021).

c. The effect of the audit committee on the value of manufacturing companies

From the calculations, the audit committee does not affect the value of the company so that H3 is rejected. The value of the company is not influenced by the number of the company's audit committee, this can happen because the number of audit committee meetings does not show the influence of the quality of the meeting so that it does not affect the value of the company (Setiono &; Wijaya, 2022). This acquisition supports research (Rahmawati, 2022) and (Setiono &; Wijaya, 2022).

This achievement is not in line with agency theory which suggests that the audit committee can solve agency problems, because it does not function to control internal well, and the number of audit committee members is minimal (Rahmawati, 2022).

d. The influence of the independent board of commissioners on the value of manufacturing companies

From the hypothesis test, the independent board of commissioners influences the value of the company so that H4 is accepted. This matter shows that the higher percentage of the independent board of commissioners, the higher the value of the company. This phenomenon occurs because the independent board of commissioners of sample companies can carry out supervisory functions in order to control the policies and activities carried out by the directors and result in an increase in company value (Muryati &; Suardikha, 2014). This achievement supports research (Muryati &; Suardikha, 2014) and (Rahmawati, 2021).

This acquisition is in line with agency theory which states that "the independent board of commissioners is considered to be the highest internal control mechanism responsible for overseeing top management policies", the agency theory suggests that the large number of independent board of commissioners members can make it easier to control top management and improve the supervisory function so that company value increases (Rahmawati, 2021).

e. The effect of financial performance on the value of manufacturing companies

From the acquisition of the hypothesis, financial performance does not affect the value of manufacturing companies. This gain is not in line with signaling theory which suggests that increasing profitability describes the company's ability to get more profits, which will result in investors being interested in buying company shares (Astutik, 2021). This can happen because management performance is unable to use its assets, resulting in decreased net profit while company assets increase (Andika et al., 2021). The acquisition of this research supports the research (Andika et al., 2021).

f. The role of financial performance as a mediation on the influence of managerial ownership on the value of manufacturing companies

From the acquisition of hypotheses, financial performance has not been able to mediate managerial ownership with company value. This acquisition is not in accordance with agency theory which states that management ownership can suppress agency conflicts and have an impact on company profits (Astutik, 2021). This happens because the percentage of management share ownership is very small, so agency problems can arise because management is not included in the majority of company shareholders (Saputri &; Isbanah, 2021). The acquisition of this research supports research (Astutik, 2021), (Saputri &; Isbanah, 2021), (Rahman &; Asyik, 2021), and (Setiono &; Wijaya, 2022).(Setiono & Wijaya, 2022)

g. The role of financial performance as a mediation on the influence of institutional ownership on the value of manufacturing firms

Based on the hypothesis test, financial performance has not been able to mediate institutional ownership with company value. This acquisition is not in line with agency theory, that institutional shareholding can oversee management work so as to reduce agency conflicts and impact on the company. This can happen because company owners cannot interact directly for the company, only relying on financial statements so that the data owned is only a little compared to managers. This hinders the company from achieving its goals (Saputri &; Isbanah, 2021). These results are in line with research

(Rahman &; Asyik, 2021) and (Saputri &; Isbanah, 2021).

h. The role of financial performance as a mediation on the influence of the audit committee on the value of manufacturing companies

Based on the hypothesis test, financial performance has not been able to mediate the audit committee with the value of the company. This acquisition is not in line with agency theory, the audit committee is needed to overcome the shortcomings run by the management. This happens because the audit committee has not been able to guarantee the effectiveness of the audit committee's performance when controlling financial performance, because the audit committee does not just carry out company financial control but carries out control in the non-financial field and runs meetings in order to maintain its image in front of investors (Saputri &; Isbanah, 2021). These results are in line with research (Saputri &; Isbanah, 2021) and (Setiono &; Wijaya, 2022).

i. The role of financial performance as a mediation on the influence of the independent board of commissioners on the value of manufacturing companies

Financial performance has not been able to mediate the independent board of commissioners on the value of manufacturing companies. This acquisition does not support agency theory, stating that the independent board of commissioners can handle agency issues because the supervisory role carried out is more objective in managing management related to company profits. This happens because the independent board of commissioners are board members who come from outside the company so that there is limited knowledge about the company, this causes ineffective supervision carried out on the management of the company (Astutik, 2021). These results are in line with research (Saputri &; Isbanah, 2021), ((Saputri & Isbanah, 2021)Rahman &; Asyik, 2021) and (Astutik, 2021).

IV. CONCLUSION

The purpose of this study is to examine the mediating role of financial performance in the relationship between GCG and company value in food and beverage subsector manufacturing companies listed on the IDX in 2019 – 2021. The acquisition of the hypothesis test shows the results that "managerial ownership, institutional ownership, and audit committee do not affect company value, while the results of the independent board of commissioners have a positive effect on company value", this happens because the independent board of commissioners can supervise in supervising company policies and activities carried out by the board of directors optimally so that it has an impact on company value. Financial performance does not affect the value of the company. The acquisition of mediation suggests that financial performance has not been able to mediate GCG, this is because the company has not maximally created good company management so that it is always contrary to agency theory which causes companies difficulty in adding value.

The practical implication for companies should be to be able to pay attention to the proportion of independent board of commissioners being a component in taking investment, because these factors can positively affect the value of the company where an increase in the percentage of independent board of commissioners will affect the increase in company value. It is expected that the next researcher can add or use different proxies of Good Corporate Governance such as: board of directors, family ownership and profit quality.

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Audit Delay Analysis: The Influence Of Financial Distress, Leverage, And Management Change

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ABSTRACT

Audit Delay is the time interval for completion of the audit measured from the closing date of the financial year, until the opinion of the financial statements audited by the independent auditor has been signed. In Indonesia, there are still many companies that are late in reporting financial reports on time. The Financial Services Authority (OJK) stipulates that financial reports must be published immediately a maximum of 90 days from the end of the fiscal year. The audit delay phenomenon could be due to a lack of relevance in the financial statements presented to investors. This study aims to determine how much financial distress, leverage, and management changes can affect audit delay in all manufacturing companies listed on the Indonesia stock exchange in 2019-2021 both partially and simultaneously. The approach used in this research is a quantitative approach. The sample selection in this study used the exhibitive sampling method, and obtained 18 companies for 3 years (2019-2021), so that the total sample was 54 samples. The data analysis technique in this study used linear regression analysis. The results of this study indicate that the financial grieving variable has a negative effect on audit delay, while the capital and management variables have no effect on audit delay.

Keywords : *Audit Delay ; Change of Management ; Financial Distress ; Leverage* ; *Change of Management*

I. INTRODUCTION

Financial statements are structured presentations that describe the financial position resulting from the accounting process during a certain period to convey information to interested parties (IAI, 2015). Financial statements must also be prepared in accordance with applicable Financial Accounting Standards (SAK) and have been audited by an external auditor. The purpose of financial reporting is used for the accountability of a company because it can be a reference for users in making decisions. These decisions can be used by users to make decisions in investing.

According to POJK No. 37 / POJK.03 / 2019 concerning transparency and publication of bank reports, the financial statements must have the same quality as the financial statements in the previous year's period. The Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX) stipulate that there are strict regulations regarding the quality, quantity and timeliness of financial report submission. Companies that have gone public must submit their financial statements and audit opinions to the Capital Market Supervisory Agency (BAPEPAM). This requires the timeliness of the completion of financial reports so as not to cause delays in the publication of financial reports at BAPEPAM. In the decision letter of the board of directors of the Indonesia Stock Exchange (IDX) No. Kep-00015 / BEI / 01-2021 it is written that the deadline for submitting annual financial reports is no later than the end of the third month (3) or for 90 days from the end of the fiscal year. This provision applies to all companies listed on the Indonesia Stock Exchange (IDX), without exception manufacturing companies.

In the announcement of the submission of audited financial statements No : Peng-LK-0005-7/BEI.PP1-3/06-2021, dated June 10, 2021, which states that there are 88 companies that have not submitted audited financial reports ending December 31, 2020. While 46 of them are manufacturing companies. The delay in the publication of these financial statements indicates that there are problems that occur in the company which results in an increase in the length of the audit completion (Puryati, 2020).

This study aims to determine the effect of financial distress, leverage, and management changes on audit delay. The period in this study is 2019-2021 because in that year there was a phenomenon of increasing manufacturing companies that were late in reporting their financial statements.

According to Jensen & Meckling (1976), agency arises when the contractual relationship between the owner of capital (principal), namely the investor and the manager (agent) is difficult to create due to conflicting interests. The differences owned by the principal and agent can cause problems known as information asymmetry. Information asymmetry occurs when there is an unequal distribution of information between the two. This theory explains that the auditor functions as an independent verifier of the financial statements presented by the company to investors. This theory is closely related to audit delay, if the publication of financial statements is not on time, it will cause the value of information in the financial statements to decrease. The reduction in information will cause information asymmetry. In this case, timeliness can also be seen as a way to reduce information asymmetry and reduce the opportunity to spread rumors about the company's financial health and performance.

The first factor that affects audit delay is Financial Distress (Praptika & Rasmini, 2016). Financial Distress is a condition where the company is experiencing difficulties in operating cash flow that is insufficient to meet current obligations (Ross. A Westerfield Randolph W, 2003). This factor can affect audit delay because if this condition occurs it can increase the risk of independent auditors, because this will cause the financial statement audit process to take longer.

The second factor that can affect audit delay is leverage. Leverage is a condition where the company uses assets and funds that have a fixed burden, which means that the source of funds comes from loans that have interest which will increase the potential profits of shareholders (Dianova et al., 2018). High leverage indicates that the company is experiencing high financial risk because the company is financed with debt (Fujianti & Satria, 2020). So, companies that experience difficulties in fulfilling their obligations tend to delay the publication of their financial statements.

Another factor that affects audit delay is Management Change. Management change is an effort to change made by the company so that the company's conditions develop and get better. Management changes occur because the existing management structure in the company is not going well, so that the condition of the company can be said to continue to decline. Then, the change of directors or Chief Executive Officer (CEO) is decided at the General Meeting of Shareholders (GMS). The change of directors or CEO automatically changes management policy. In policy changes, when the company's condition is not good, it can hinder the timeliness of financial reporting.

Population and Sample

The method used in determining the sample for this research is using purposive sampling method. According to Sugiyono (2016: 85), purposive sampling is a technique used for data collection by selecting several specific considerations. Determination of sampling based on considerations as follows:

a. Manufacturing companies that are listed on the Indonesia Stock Exchange consecutively in 2019-2021.
b. Companies that actively publish their financial reports consecutively in 2019-2021.
c. Companies that use rupiah currency.
d. Companies that experience audit delay consecutively in 2019-2021.

Dependent Variable
Audit Delay (Y)

Audit Delay is the time distance between the date of the financial report and the date of the independent auditor's opinion in the financial report which indicates the length of time the audit is completed by the auditor (Siahaan et al., 2019). The following are indicators of audit delay, (Utami 2008: 4):

$$\textit{Audit Delay} = \text{Tanggal Laporan Audit} - \text{Tanggal Laporan Keuangan}$$

Independent Variable
Financial Distress (X1)

Indicators of financial distress can be shown from several things, namely that the company has a negative profit (net income) for two consecutive years, a reduction or failure to pay dividends at all, as well as an increase in debt for two consecutive years (Salim & Ismudjoikoi, 2021). The measurement of financial distress uses the Altman Z-Score method:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$$

Where:
X_1 = Net Working Capital / Total Asset
X_2 = Retained Earnings / Total Assets
X_3 = Earnings Before Interest and Taxes / Total Assets
X_4 = Market Value of Shares and Preferred
X_5 = Sales / Total Assets

Leverage (X2)

The level of leverage is a measurement of the company's ability to fulfill financial obligations, both short-term and long-term financial obligations (Diviantoi, 2009). Debt to asset ratio is formulated as follows:

$$DAR = \frac{\text{Total Hutang}}{\text{Total Aset}}$$

DAR = Debt to Asset Ratio

Total Debt = The amount of debt in the relevant yea

Total Asset = The range of aseit in the year under review

Change of Management (X3)

Description	Total
Population: Manufacturing companies listed on the IDX in 2019-2021	164
Companies that are not listed on the IDX consecutively from 2019-2021	(3)
Companies that did not submit their financial statements in 2019-2021	(5)
Companies that do not use rupiah currency	(24)
Companies that do not experience Audit Delay in a row from 2019-2021	(114)
Research Sample (18x3 Years)	**54**

Management change is a change of director or chief executive officer caused by the General Meeting of Shareholders (GMS) due to poor management of the company. In this research, companies that change management are given a value of one (1) while those that do not change management are given a value of zero (0).

Data Analysis Technique

The data collection method in this study uses the financial statements of companies listed on the Indonesia Stock Exchange (BEiI) for 2019-2021. In this study, data analysis was carried out, namely descriptive statistics, classical assumption tests, and hypothesis testing.

II. RESULTS AND DISCUSSION

Table 1. Research Sample

N		54
Normal Parameters[a,b]	Mean	0,0000000
	Std. Deviation	21,15770001
Most Extreme Differences	Absolute	0,077
	Positive	0,077
	Negative	-0,054
Test Statistic		0,077
Asymp. Sig. (2-tailed)		,200[c,d]

Source: data processed by author, 2023

Descriptive Statistic

According to Ghoizali (2018), the purpose of descriptive statistics is to study the characteristics of the sample used and describe the variables in the study. The following is a descriptive statistical description of each variable for the sample companies as a whole:

Table 1. Hasil Uji Statistik Deskriptif

	N	Min	Max	Mean	Std
FD	54	0,36	6,36	2,1185	1,18347
LV	54	0,15	0,91	0,4459	0,18121
PM	54	0,00	1,00	0,0741	0,26435
AD	54	91,00	189,00	129,2593	23,73771
Valid N (listwise)	54				

Source : data processed by SPSS, 2023

Classical Assumption Test

Normality Test

The normality test is carried out to see whether the regression model of the related variables and the bias has a normal distribution or not. Researcher will use the Kolmogorov Smirnov test which can be seen in the table below:

Table 2. Normality Test Results

Source : data processed by SPSS, 2023

Based on the normality test on the K-S test, the Sig value is obtained. 0.200> 0.05, which means that the regression model fulfills the assumption of normality.

Multicollinearity Test

Table 3. Multicollinearity Test Results

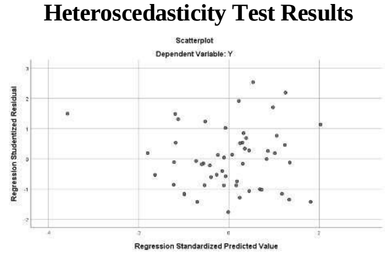
Model	Collinearity Statistics	
	Tolerance	VIF
Financial Distress	0,643	1,555
Leverage	0,633	1,579
Pergantian Manajemen	0,980	1,021

Source : data processed by SPSS, 2023

Based on table 3, it can be concluded that the VIF value is less than 10 and tolerance is more than 0.10, so it can be concluded that the three variables are free from multicollinearity problems.

Heteroscedasticity Test

Image. 1
Heteroscedasticity Test Results



Source : data processed by SPSS, 2023

The data shows that the points on the Y axis are scattered both above and below the number 0, which means that testing using Scatterplots does not have symptoms of heteroscedasticity.

Autocorrelation Test

Table 4. Autocorrelation Test Results

Model	Durbin-Watson
1	1,970

Source : data processed by SPSS, 2023

Based on table 4 the dW value is 1.970. This value will then be compared with the value of the table that uses the Durbin-Watsoin (DW) table α = 5% with a total sample size of 54 (N) and the number of variables in this study as many as 3 variables, then (K = 3), the number 1.680 is obtained from the dW table. Based on the results then put into the formula dU < dW < 4-dU (1.680 < 1.970 < 2.320). So, it can be concluded that there is no autoimmunization.

Hypothesis Test

T-test

Table 5. T-Test Results

Variabel	t	Sig.
Financial Distress	-3.379	.001
Leverage	-1.466	.149
Management Change	.704	.485

Source : data processed by SPSS, 2023

Hypothesis 1 (**H₁**): The Effect of Financial Distress on Audit Delay

The results of hypothesis testing show that the t count for financial distress is -3.379 and the profitability value is 0.001. Df 51 obtained a t table value of 2.007 so that the value of t> t table namely -3.379> -2.007 and profitability 0.001 < 0.05. The test results show that there is a negative and significant influence between financial distress (X1) on audit delay (Y).

Hypothesis 1 (**H₂**): Leverage Effect on Audit Delay

The results of hypothesis testing show that the t count for leverage is -1.466

and the Sig. value is 0.149. Df 51 obtained a t table value of 2.007 so that the t value < t table, namely -1.466 < -2.007 and profitability 0.149> 0.05. The test results show that leverage (X2) has no effect on audit delay (Y).

Hypothesis 3 (H_3): The Effect of Management Change on Audit Delay

The hypothesis test results show that the t-count result for management change is 0.704 and the profitability value is 0.485. Df 51 dipeiroileih t table value of 2.007 so that the value of t count < t table is 0.721 < 2.007 and profitability 0.85 > 0.05. The test results show that management change (X3) has no effect on audit delay (Y).

F-test

Table 6. F-Test Results

Model	F	Sig.
1	4.190	.010[b]

Source : data processed by SPSS, 2023

Based on the results of the f-test, it is known that f count> f table is 4.190> 2.79 (Df 50 & k = 3) and the amount of significance shows 0.01 <0.05. So this shows that the variable independen *financial distres* (X1), leverage (X2), and management change (X3) simultaneously have an effect on the dependent variable audit delay (Y).

R^2-test

Table 6. R^2-test result

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate
1	.448[a]	.201	.153	21.847

Source : data processed by SPSS, 2023

The R value is a symbol of coefficient. In the table above, the coefficient value is 0.448. This value can be interpreted that the relationship between the two research variables is in the moderate category. Through the table above, the R Square value or the Coefficient of Determination (KD) is also obtained, which shows how good the regression model created by the interaction of the basic variables and the dependent variables is. The value of KD is 0.201. So it can be interpreted that the variable variable X has a contribution of 20.1% to the variable Y.

DISCUSSION

The Effect of Financial Distress on Audit Delay

Financial distress has a Sig. value of 0.001 smaller than $\alpha = 0.05$ with a count value of -3.379, it can be said that the financial distress variable has a negative and significant effect on the audit delay variable. Then it can be concluded that H_1 is accepted. This means that high financial distress shortens the audit delay. Even though the company is experiencing financial distress, the company can still submit audited financial statement information on time. This negative effect result is evidenced by the higher the Z-Score value, the shorter the audit delay will be. The mean value of companies that have a Z-Score value of 2.11> 1.81 indicates that the companies from this sample are in a vulnerable condition and it cannot be determined whether the company is bankrupt or not. The high proportion of financial difficulties in the company can raise concerns for auditors. Auditors do not want the company to experience financial distress and also audit delay. So, in this condition of financial difficulty, internal auditors increase audit risk, namely control risk that can overcome obstacles in accordance with predetermined procedures before the financial statements are audited by external auditors. Thus, the process of completing the audit of financial statements does not take too much time even though the company is experiencing financial difficulties and can shorten the audit delay.

The Effect of Leverage on Audit Delay

Leverage value t-count -1.466 with a Sig. value of 0.149 where this value is more than the value of $\alpha = 0.05$, this indicates that the leverage variable has no effect on audit delay. So it can be concluded that H_2 is rejected. The calculation of the leverage ratio in this study uses the DAR formula. DAR is calculated by dividing total debt by total assets. However, the results of this study indicate that companies that have a large or small DAR will still minimize audit delay to convince shareholders and creditors that the company remains in good condition. A low level of leverage indicates that management can manage company finances efficiently, and company funds originating from debt are used to generate returns, so that the company has no difficulty paying off its obligations. So that the level of debt owned does not affect the time span required to complete the audit of financial statements.

The Effect of Leverage on Audit Delay

Based on the hypothesis test results, the Sig. value of the management change variable is 0.485, which is more than $\alpha = 0.05$ and the count value is around 0.704. The hypothesis proposed is not the same as the results of the research conducted, namely that management changes affect audit delay. So it can be concluded that H_3 is rejected. Based on the existing calculations on the dummy variable, there were 4 companies that made management changes while 14 companies did not make management changes. In the annual report sample, companies that make management changes in this research sample do not change the application of accounting rules and methods, so they do not have a significant impact on the financial statement audit process. The audit process will continue according to the audit standards and the time period stated in the engagement letter.

CONCLUSION

Based on the results of data analysis and discussion related to the problems and objectives of the research, it can be concluded as follows:

1. Financial distress has a negative and significant effect on the Indonesian edified exchange (IDX) on audit delay in manufacturing companies listed in 2019-2021.
2. Leverage has no effect on audit delay in manufacturing companies listed on the Indonesian stock exchange (IDX) in 2019-2021.
3. Management change has no effect on audit delay in manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2019-2021.

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The Effect Of Taxpayer Knowledge And Accountancy Understanding On Taxpayer Compliance In Sidoarjo

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ABSTRACT

The purpose of this study to prove the effect of taxpayer knowledge and accountancy understanding on taxpayer compliance. The variables in this study were measured using a Likert scale from 1 for strongly agree to 5 for strongly disagree. The sample in this study was 100 UMKM in Sidoarjo. The number of samples was taken based on the Slovin formula by methode random sampling, then analyzed using multiple linear regression tests and individual parameter significant tests. The results of this study indicate that taxpayer knowledge and accountancy understanding affect on taxpayer compliance. Recording of business transactions in simple bookkeeping by UMKM and knowledge of taxpayers affect on taxpayer compliance in Sidoarjo.

Keywords : *taxpayer knowledge, accountancy understanding, taxpayer compliance*

I. INTRODUCTION

Tax is an obligation that must be paid by the public to the state (Widiastuti, 2016). Taxes became the largest state revenue compared to other sectors in 2013, approximately 78% of these revenues (1,192,994 billion rupiah) came from tax revenues and the rest came from other sectors (Tahar & Rachman, 2014). The main source of APBN funds comes from tax revenues, which are then allocated to fund various state expenditures for the prosperity of the people (Putri & Setiawan, 2017).

Taxes have an important role in state revenue today (Agustina, 2016). Efforts to maximize tax revenue require the active role of the taxpayers themselves as well as the Directorate General of Taxes and tax officers. Tax collection in Indonesia uses a self-assessment system in which taxpayers are entrusted with calculating, reporting and paying their own taxes (Andinata, 2015). Among the types of taxes that become revenue in state revenue is Income Tax.

Income tax receipts in the last five years have decreased significantly in 2020 with total income tax receipts of 594 033.33 billion Rupiah, but have increased again in 2022 with total income tax receipts of 895 101.00 billion Rupiah. The unstable condition of tax revenue every year indicates that there are several influencing factors. The results of research conducted by (Warsito & Samputra, 2021) show that the potential loss of Corporate Income Tax (PPh Badan), Article 21 Income Tax (PPh Pasal 21), and DN VAT revenues (PPN DN) in 2020 is IDR 71,748,166,578,327. There is instability in income tax revenue in the period 2018 to 2022, so researchers look at it in terms of taxpayer compliance factors. Taxpayer compliance is an important element in encouraging the realization of a country's tax revenue (Prastiwi, 2021). The government has made efforts to increase taxpayer compliance with the application of 0.5% Final Income Tax (PPh Final) to make it easier for taxpayers to carry out their tax obligations. The tax calculation is 0.5% of gross circulation which was previously subject to a 1% rate (Kartikasari & Yadnyana, 2020).

II. LITERATURE REVIEW & HYPOTESIS DEVELOPMENT

Attribution Theory

Attribution theory was first introduced by Fritz Heider in 1958 in a book entitled The Psychology of Interpersonal Relationship. Redae (Redae & Sekhon, 2015) defines attribution theory as an assessment of good behavior by others and oneself. In this case, attribution theory seeks to find what causes and motivates individuals when they are doing something.

The assessment of the intended behavior in the attribution theory is carried out by analyzing whether the assessment of the individual's behavior comes from internal influences or external influences. The influence of internal behavior is behavior that is under the control of the individual, while the influence of external behavior is behavior that is influenced by environmental conditions (Robbin, 1996). Attribution theory is quite relevant to explain taxpayer compliance behavior. In this theory, taxpayer knowledge and accounting understanding are considered as internal influences that underlie taxpayer compliance behavior, because tax knowledge and accounting understanding are one of the factors that influence taxpayer compliance behavior with the self-assessment system. In this system, taxpayers are required to calculate and report the amount of tax owed on their own (Faizal et al., 2017).

Cognitive Psychology Theory

Cognitive psychology theory is an approach to psychology that studies mental processes or basic things that underlie human thought. Cognitive psychology theory states that the brain or mind allows individuals to remember, imagine, evaluate, perceive, and process types of information to produce responses (Hastardjo, 2004). Cognitive itself means the ability to think (intellectual), in this case all kinds of information related to procedures for carrying out tax obligations will be represented in the taxpayer's brain and converted into tax knowledge which then from this knowledge will be used to direct the attention or behavior of the taxpayer towards compliance (Khusnul & Prastiwi, 2019).

Taxpayer Knowledge

Taxpayer knowledge is everything that is known to taxpayers in understanding tax regulations and how to calculate the tax to be paid (Erlina & Ratnawati, 2018). Adequate knowledge of taxation will help make it easier for taxpayers to understand the provisions of tax laws and convince taxpayers of the importance of paying taxes for the implementation of state development (Sucahyani & Sukartha, 2017).

Taxpayer knowledge is an important factor in increasing taxpayer compliance, if the taxpayer knows well about the applicable tax provisions, then the taxpayer voluntarily fulfills his tax obligations (Zuhdi, 2015)

H0: There is an effect of taxpayer knowledge on taxpayer compliance
H1: There is no effect of taxpayer knowledge on taxpayer compliance

Accounting Understanding

Understanding accounting is knowing the accounting process both in stages and financial accounting standards (SAK) that apply to business entity taxpayers, namely in the form of bookkeeping or financial reports (Leviana et al., 2022). If the taxpayer has a good understanding of accounting, it will make it easier for the taxpayer to carry out his obligations (Habibie, 2018).

Understanding of accounting is related to the ability to understand and understand the transaction process to become financial reports. Taxpayers can be said to have a good understanding if they can properly carry out bookkeeping (Trihatmoko & Mubaraq, 2020).

H3: There is an effect of understanding accounting on taxpayer compliance

Taxpayer Compliance

In relation to taxpayers, compliance can be defined as the behavior of taxpayers in fulfilling their tax obligations in accordance with applicable regulations (Witono, 2008). Taxpayer compliance is an attitude of taxpayers complying with applicable regulations in fulfilling their tax obligations (Adam et al., 2020). Taxpayer compliance is a mirror in the implementation of the self-assessment system implemented in Indonesia (Lubis, 2019).

Tax compliance can be seen as fulfilling tax obligations consisting of formal compliance which includes tax administrative requirements that must be met by taxpayers and material compliance which includes the correctness of tax calculations and reporting of tax payable (Prastiwi et al., 2019).

H4: There is no effect of understanding accounting on taxpayer compliance

III. RESEARCH METHOD

This research uses a type of quantitative research that uses data in the form of numbers with statistical calculations. Quantitative research is a method based on the use of statistical techniques to determine certain aspects of the population or sample studied (Suárez et al., 2017).

Data collection was carried out through survey research using the g-form instrument, with the aim of testing the established hypotheses. The technique used in data collection is Simple Random Sampling. According to Sugiyono (2017: 32) the Simple Random Sampling

technique is taking sample members from a population that is carried out randomly without regard to the strata in that population. The type of data used is primary data taken directly from the g-form questionnaire that has been filled in by the respondent. The g-form questionnaire contains statements made by researchers to UMKM respondents in Sidoarjo Regency. In this study using a Likert scale to measure knowledge, understanding, and perceptions related to the phenomena in this study.

Table 1. Questionnaire Rating Likert Scale

Strongly agree			Strongly Disagree	
1	2	3	4	5

IV. RESULTS AND DISCUSSION

Classical Assumption Test

Normality test

Table 2 Normality test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.02659136
Most Extreme Differences	Absolute	.070
	Positive	.057
	Negative	-.070
Test Statistic		.070
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: Primary data processed, 2023

Data that are classified as good are normally distributed. The Kolmogorov-Smirnov (K-S) non-parametric statistical test can be used in the normality test. The results of the Kolmogorov-Smirnov test can be seen from the calculation of the significant probability value of 0.200 ≥ 0.05 so that the data is classified as normally distributed.

Based on the KS Test table states a significant value of 0.200 > 0.05, meaning that the data in this study are normally distributed. These results get a probability value of more than 0.05 which can be concluded that the data has been normally distributed.

Multicollinearity Test

Table 3 Multicollinearity Test

Variable	Collinerirty Tolerance	VIF	Results
Taxpayer Knowledge (X_1)	0,479	2.090	No Multicollinearity
Accounting Understanding (X_2)	0,479	2.090	No Multicollinearity

Source: Primary data processed by author from spss output, 2023

If the tolerance value is ≥ 0.1 or the VIF value is ≤ 10, this is an indication that there is no multicollinearity. each independent variable is 0.479 > 0.1 while the VIF value is 2,090 <10 which indicates that there are no symptoms of multicollinearity between the independent variables in the regression model in this study.

Heteroscedasticity Test

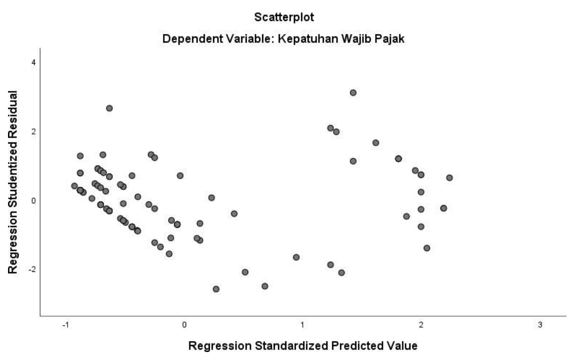

Figure 1. Heteroscedasticity

Based on Figure 1, the Scatterplot heteroscedasticity test illustrates that there are no symptoms of heteroscedasticity. This is because the data points do not converge in the middle, the spread is above and below around 0, and no particular pattern is found.

Hypothesis Test Results

T Test

The t test is intended to see whether the independent variable can partially influence the dependent variable. If the probability is significant (p) < 0.05, then there is an influence from variable X on variable Y.

Table 4. **T Test**

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	-3.534	.793		-4.456	.000
Taxpayer Knowledge	.937	.063	.829	14.792	.000
Accounting Understanding	.121	.054	.126	2.248	.027

a. Dependent Variable: Taxpayer Compliance

Source: Primary data processed, 2023

If the sig. <0.05, then the independent variable is stated to have a positive effect on the dependent variable. In accordance with the table above, the t-test results calculated for each variable, namely:

1) The significant value of the Taxpayer Knowledge variable (X_1) is 0.000 <0.05 meaning that H1 is rejected because there is an influence of Taxpayer Knowledge (X_1) on Taxpayer Compliance (Y) or H0 is accepted.
2) The significant value of the Accounting Understanding variable (X_2) is 0.27 <0.05, which means that H4 is rejected because there is an influence on the Accounting Understanding variable (X_2) with Taxpayer Compliance (Y) or H3 is accepted.

F Test

Table 5. **F Test**

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2381.400	2	1190.700	284.058	.000[b]
Residual	406.600	97	4.192		
Total	2788.000	99			

a. Dependent Variable: Taxpayer Compliance

b. Predictors: (Constant), Accounting Understanding, Taxpayer Knowledge

Source: Primary data processed, 2023

Because the sig value does not exceed 0.05, the results of the simultaneous test show that the sig level at 0.00 indicates that the independent variables have a significant effect simultaneously on the dependent variable.

Coefficient of Determination (R^2)

Table 6. Model Summary

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.924[a]	.854	.851	2.047

a. Predictors: (Constant), Accounting Understanding, Taxpayer Knowledge

b. Dependent Variable: Taxpayer Compliance

Source: Primary data processed, 2023

Based on the test, the independent variables affect the dependent variable by 85.1% simultaneously, as shown by the Adjusted *R* Square figure of 0.85.

Discussion

This study aims to examine the effect of Taxpayer Knowledge and Accounting Understanding partially on Taxpayer Compliance in Sidoarjo.

The collection of research data was carried out through survey research using the g-form instrument, with the aim of testing the established hypotheses. The technique used in data collection is Simple Random Sampling. The sample in this study consisted of 100 samples. The sample in this study was processed using the SPSS 26 program. Based on the formulation of the problem, the discussion of this study is explained as follows.

1. The Effect of Taxpayer Knowledge on Taxpayer Compliance in Sidoarjo

From the test results, the Taxpayer Knowledge variable has an influence on Taxpayer Compliance in Sidoarjo, the significant value of the Taxpayer Knowledge variable (X_1) is with a value of 0.000 <0.05 which indicates that H0 is accepted, there is a positive effect of Taxpayer Knowledge on Compliance Tax.

Based on the data obtained, it is known that Taxpayer Knowledge can have an effect because adequate tax knowledge will help make it easier for Taxpayers to understand the provisions of the tax law and convince Taxpayers of the importance of paying taxes. This is also supported by previous studies, Taxpayer knowledge is an important factor in increasing taxpayer compliance, if the taxpayer knows well about the applicable tax provisions, then the taxpayer voluntarily fulfills his tax obligations (Zuhdi, 2015).

This supports Cognitive psychology theory. In this theory, all kinds of information related to procedures for carrying out tax obligations will be represented in the taxpayer's brain and converted into tax knowledge which then from this knowledge will be used to direct the attention or behavior of the taxpayer towards compliance.

2. The Effect of Accounting Understanding on Taxpayer Compliance in Sidoarjo.

Based on the results of this study, Accounting Understanding (X_2) has a significant effect on Taxpayer Compliance, with a test value of 0.027 <0.05 indicating that H3 is accepted, there is a positive effect of Accounting Understanding on Taxpayer Compliance.

Based on the data obtained, it is known that Accounting Understanding can have an effect because taxpayers having a good understanding of accounting will make it easier for taxpayers to carry out their obligations. This is also supported by previous studies, partially the Tax Accounting Understanding variable has a significant positive effect on taxpayer compliance (Margiota & Diana, 2022).

This supports the attribution theory. In this theory, accounting understanding is considered as an internal influence that underlies taxpayer compliance behavior, because accounting understanding is one of the factors that influence taxpayer compliance behavior with the self-assessment system. This system requires taxpayers to calculate and report their own amount of tax owed.

V. CONCLUSION

Based on the results of research conducted by researchers regarding taxpayer knowledge and understanding of accounting for taxpayer compliance in Sidoarjo, the following conclusions can be drawn.

1. Taxpayer knowledge (X_1) partially has a positive impact on taxpayer compliance in Sidoarjo.

2. Understanding of accounting (X_2) partially has a positive impact on taxpayer compliance in Sidoarjo.

Based on the results of this study concluded that the knowledge of taxpayers and understanding of accounting partially has a positive impact on taxpayer compliance in Sidoarjo.

This study has limitations, in this study only tested several variables that affect taxpayer compliance in Sidoarjo, namely taxpayer knowledge and understanding of accounting.

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Comparison Of Financial Distress In Companies Affected By TheCovid-19 Pandemic

(Empirical Study Of Hotel, Restaurant, Tourism, And Aviation Sub SectorCompanies Listed On The Indonesia Stock Exchange)

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ABSTRACT

The extraordinary impact on the global economy in early 2020 was caused by COVID-19, one of which was financial system stability. Economic instability causes a decrease in company revenue, especially in hotel, restaurant, tourism and aviation subsectors, which can lead to financial distress. Financial Distress analysis is important to provide an overview of the company's financial condition. This study aims to determine the difference in the level of financial distress before and during the COVID-19 pandemic in hotel, restaurant, tourism, and aviation sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2019–2022, using the Altman Z-score calculation model. The data used in this study are secondary data taken from financial reports through the official IDX website, www.idx.co.id. Sample determination was carried out using the purposive sampling method. The number of samples selected was 36 companies. The analysis technique used in this research is one-way analysis of variance. The results showed a value of 0.885 > 0.05, which means that there is no difference in the level of financial distress in companies before and during the COVID-19 pandemic.

Keywords : Financial Distress, Altman Z-Score, COVID-19 Pandemic, Hotel Restaurant, Tourism, and aviation Sub-sector Companies

I. INTRODUCTION

Every element is negatively impacted by COVID-19, but the economy is particularly affected. The COVID-19 has had an impact on a lot of businesses in Indonesia. One of them is a company engaged in the hotel, restaurant, tourism, and aviation subsectors. The coronavirus pandemic has become a serious threat. This pandemic has affected people's habits and harmed their health, social life, and economy (Khan et al., 2020). According to the International Monetary Fund, when the crisis occurs in the global economy, contraction or negative economic growth is predicted to be experienced by 95% of countries (Rahmah & Novianty, 2021).

Based on the Ministry of Finance's statement, the hotel, restaurant, tourism, and airline sub-sectors are the most affected companies due to the pandemic. Implementing the Large-Scale Restrictions (PSBB) policy is one of the steps designed to stop the spread of the coronavirus. Due to people spending more time at home, there has been a sharp decline in the number of people visiting restaurants and hotels (Nainggolan, 2021). Therefore, tourist visits, which were originally 16,106,954 in 2019, experienced a sharp decline in 2020, with a total of only 4,052,923 visits. more than 2,000 hotels and 8,000 restaurants to close. During January to April 2020, the total potential lost revenue was IDR 70 trillion, which was divided between the hotel sector at IDR 30 trillion and restaurants at IDR 40 trillion. Meanwhile, foreign exchange losses reached US$4 billion. The pandemic also affected the aviation sector, which resulted in flight cancellations throughout January–February 2020 for a total of 1,023 international flights and 11,780 domestic flights. This industry had a reduction in revenue, which was also correlated with a decrease in foreign visitor arrivals in Indonesia. International visitors to Indonesia will arrive in substantially smaller numbers in 2020 than they did in 2019 (Badan Pusat Statistik, 2023).

Platt & Platt, (2002) defines financial distress as a condition where the company's finances continue to decline gradually before bankruptcy occurs. Not only economic factors, but financial distress can also be caused by changing environmental factors. One of the causes of environmental changes is unexpected events, disasters, and outbreaks such as the COVID pandemic.

According to Nadiya Nafisamuna & Nurfauziah, (2022), the level of financial distress experienced by companies is important to be compared, this is because COVID-19 brings negative changes to the level of financial distress experienced by companies. The results of the comparison can be used to determine how much the phenomenon affects the company's financial performance, so that the right decisions can be made by the principal and agent to assess and decide on the appropriate policy if something similar to COVID-19 happens again. The same thing was also revealed by Song et al., (2022) that the COVID-19 pandemic caused a decrease in revenue for the company, which led to an increase in the risk of corporate financial distress. Panigrahi, (2019) states that the company's worsening condition indicates financial distress, which can then trigger an aggressive response from competitors to seize opportunities to increase market share. Financial distress prediction is used as an early detection of company bankruptcy so that companies can take action for the repair process before bankruptcy occurs. Kassidy & Handoko, (2022) state that the COVID-19 pandemic phenomenon affects the difference in prediction results and needs to be considered in predicting financial distress. Therefore, research on the differences experienced by companies before and during COVID-19 is important to do.

The results of research by Mahtani & Garg, (2020) and Nadiya Nafisamuna & Nurfauziah, (2022) show that COVID-19 brings negative changes to the company's financial performance, so there are differences in the level of financial distress owned by the company. However, different results were shown by Lewaru & Loupatty, (2021) and Nurtjahjo dkk., (2022) where the COVID-19 pandemic did not show differences in the results of financial distress conditions experienced by companies.

There have been many previous studies that examine the differences in financial distress experienced by companies due to the COVID-19 pandemic, but there are differences in the results of their research. This is due to differences in the use of measurement models and the objects studied causing the diversity of research results obtained. According to Gunawan dkk., (2017) the difference or inconsistency in results is due to the different characteristics of each model, a model that is suitable for certain business categories is not always suitable for different business categories. In the previous period, the number of samples observed was only two periods, so the use of samples used was limited. Therefore, research related to differences in the level of financial distress before and during the pandemic requires renewal.

In this study, researchers added different objects from previous studies, namely adding the aviation sector, in addition to the hotel, restaurant and tourism sub-sector companies. Companies engaged in the aviation sector were also adversely affected during the pandemic. The number of countries that implement lockdowns to reduce the spread of the corona virus has caused the aviation sector to also experience a drastic decline, because this sector must be forced to reduce its flight schedules, especially international flights. As a result of the Covid-19 phenomenon, a number of airlines have closed their operations (Nainggolan, 2021).

In addition to different objects, the description of the results of the analysis is also different from previous studies. In previous studies, the focus of the results was on the financial condition, while in this study the assessment of the research results was accompanied by disclosure of the differences in the use of strategies taken by the principal and agent which led to an increase or decrease in the company's financial condition in facing the challenges of the Pandemic phenomenon. According to Priyatiningsih, (2016) adjusting business strategies to the environment or resources owned by the company is important.

Therefore, researchers are interested in conducting research related to financial distress that occurs in relation to the COVID-19 event, whether unexpected events such as the Covid-19 pandemic will have an impact on differences in the financial distress zone experienced by companies in the hotel, restaurant, tourism and aviation sub-sectors.

II. RESEARCH METHOD

This study uses a quantitative approach with the use of secondary data in the form of financial reports taken through access to the website www.idx.co.id, which is the official website of the Indonesia Stock Exchange.

In this study, the sample used was 144 companies in the tourism, hotel, restaurant, and aviation sub-sectors listed on the Indonesia Stock Exchange in 2019–2022. The technique used is purposive sampling with the following criteria:

Table 1 sample criteria and amount

No	Criteria	Amount
1.	Companies listed on the Indonesia Stock Exchange (IDX).	833
2.	Hotel, restaurant, tourism and aviation sub-sector companies listed on the Indonesia Stock Exchange (IDX) in 2019-2022.	47
3.	**Minus:** hotel, restaurant, tourism, and aviation sub-sector companies that did not publish their financial statements in 2019-2022.	(11)
4.	Total companies used as samples from 2019-2022.	36

To calculate the value of financial distress experienced by the company, the Altman Z-Score model is used. This method was chosen due to its accuracy of up to 90.9% in predicting company bankruptcy and 97% in predicting the non-bankruptcy of a company based on the payment of obligations owned by the company (Altman, 1968).

The formula of the Altman Z-Score Model is as follows:

Z" = 6,56 WCTA + 3,26 RETA + 6,72 EBITTA + 1,05 BVEBVL

Description:

WCTA = Working Capital to Total Asset
RETA = Retaine Earning / Total Asset
EBITTA = EBIT / Total Asset
BVEBVL= Book Value of Equity / Book Value of Total Liabilities.

The Altman Z-Score Model analysis is based on the following values:

- Nilai Z"< 1,1 = Distress Zone
- Nilai 1,1<Z"<2,6 = Grey Zone
- Nilai Z" > 2,6 = Green Zone

III. RESULTS AND DISCUSSION

Descriptive Statistic Test

A descriptive statistical test is used as a medium for describing the calculation results of financial distress predictions to analyze data, which is then used to provide a description of the data that has been collected to draw general conclusions. The results are the average data (mean), standard deviation, maximum, and minimum values from the calculation of financial distress predictions using the Altman Z Score method (Ghozali, 2016). The following are the results of descriptive statistics for each variable calculated using SPSS software version 26:

Tabel 2 Descriptive Statistics Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
2019	36	-10.63	216.51	10.24	36.10
2020	36	-13.88	716.28	22.90	119.12
2021	36	-18.29	301.31	10.91	50.56
2022	36	-19.07	401.71	15.08	67.14

Classic Assumption Test

Tabel 3 Normality Test

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	144
Asymp. Sig. (2-tailed)	.200[c,d]

Multicoleniarity Test

The Result of the calculation of the tolerance value of all variables > 0.10 mean that there is no correlation between independent variables with a value > 95%. As for VIF calculation, it can be seen that the overall VIF value is 10.00, so it can be concluded that this study is free from multicoleniarity between independent variables in the regression model.

Autocorellation Durbin Watson Test

The results show the D-W value obtained is 2.086, the DU value is 1.7851, and the 4-DU value is 2.2149, or du d 4-du. This means that, based on these results, no autocorrelation was found in the study.

Heterokedastisity Test

The use of the heteroscedasticity test aims to observe the residual variance of the variables used to determine whether it is not the same (Ghozali, 2016). This study uses the Glejser test to determine whether the research data is homogeneous or not. The result is that the significance value of the four variables is (0.918, 0.779, 0.066, 0.252) > 0.05, meaning that it certainly does not contain heteroscedasticity.

Hypothesis One Way Analysis of Variance

The one-way analysis of variance test results show a value of 0.885 > 0.05. Based on the results, it is concluded that there are no differences in financial distress in the tourism, hotel, restaurant, and aviation sub-sector companies listed on the IDX before and during the COVID-19 pandemic.

DISCUSSION

In the hotel, restaurant, tourism, and aviation sub-sectors of the 36 companies studied, there are 21 companies that do not experience zone changes throughout 2019 to 2022, and 6 of them (AKKU, CLAY, CMPP, GIAA, BUVA, and FITT) are continuously in the distress zone.

PT AirAsia Indonesia Tbk (CMPP) experienced financial distress before the pandemic took place; the cause was an increase in aircraft rental costs by 45% and fuel costs by 35%. A total of nine new routes were launched to improve the company's position in the domestic market, including five international routes. As a result, the company's revenue increased sharply by 63.07% on an annualized basis. However, this increase was still unable to cover the cost of expenses borne by the company. Then, after the pandemic, the company could not recover; passengers fell by 83% due to the closure of several routes due to restrictions imposed to prevent the spread of the pandemic. Efforts made by the company's management were to sell flight tickets at low prices, but this strategy could not attract consumer demand even in the holiday season and year-end conditions. Reducing the number of aircraft to be operated was also carried out to reduce costs incurred. (Rosana, 2021). Financial distress experienced by companies both before and during the pandemic is in the same difficult condition; the strategies carried out by companies in both situations still cannot cover the losses experienced by the company.

Then there are two companies in the gray zone category, including DFAM and HRME. PT Menteng Heritage Realty Tbk (HRME) before the pandemic had experienced unfavorable conditions caused by the high political temperature that occurred in the country, and the situation with tensions due to trade between large countries still overshadowed the community. This has an effect on reducing the occupancy rate of hotel rooms in the company (PT Menteng Heritage Realty Tbk, 2019). Since the onset of COVID-19 in March, hotel reservation cancellations in Indonesia have skyrocketed. With the implementation of PSBB on April 10, 2020, the demand for rooms and events disappeared. Although the hotel is still operating, there is no demand for the luxury segment that The Hermitage has been targeting. After the activities were reopened, HRME posted an increase in revenue of IDR 20 billion in 2020, but at the same time, the operating expenses incurred also increased. Even so, the burden borne by the company did not make the company decline, the company was still in the same condition as in the year before the COVID, which was in the gray zone like 2019. Growth worth 29.8 billion was experienced in 2022. This increase was caused by innovations made by the company with various programs offered.

There are 13 companies in the green zone category (ARTA, BAYU, JGLE, INPP, JIHD, KPIG, MINA, and EAST). During the COVI-19 pandemic, PT Arthavesr Tbk (ARTA) took advantage of the government's Repatriation Hotel Program, where qualified hotels were used as quarantine places for people who had just arrived from overseas travel. The company strategized by offering conservative yet competitive pricing. In addition, the company continuously improves the hotel's excellence by enhancing the quality of service, food, meeting facilities, and various digital offerings in order to get added value from guests. As a result, in 2021, the company managed to increase its sales by 44.49%, with sales of 42,088 rooms compared to 2020 (PT Arthavest Tbk, 2021). In 2022, the company further strengthened its focus on government, a strategy mainly due to funding from the World Bank for various institutions, including several ministries, with the aim of holding MICE activities in the hospitality industry. As a result, sales increased by 32.02% over the previous year, reaching 55,563 rooms. This year, the hotel also intensified its participation in various exhibitions and events in the hospitality industry and tourism sector to further increase mindshare among consumers and clients. The hotel also continued to improve its excellence by upgrading its quality (PT Arthavest Tbk, 2022). Thanks to that, the company can continue to survive both before and during the COVID pandemic. While companies that have experienced changes towards improving financial performance are PT Tourindo Guide Indonesia Tbk (PGJO), Before 2020, when COVID-19 had not yet occurred, revenue had not been obtained since June 2018 because Pigijo's website had just been soft launched. In the process, it resulted in the company's operating costs increasing (Prima, 2020). Therefore, the company is experiencing financial distress. In 2020, the pandemic will be considered by the company's management as an opportunity to gain a strategic corporate advantage. The company launched the Digital Travelpreneur Certification program, then pioneered the sociopreneur movement with #SupportLocalExpert, where Pigijo has collaborated with Indonesians abroad. With this activity, Pigijo managed to get support from the Indonesian diaspora through the purchase of virtual tour packages and regional specialty products that have been curated by the Pigijo team and displayed on the company's website, pigijo.com. Furthermore, the company held an event called PSBB, Pigijo Sharing Bareng Bareng, which was presented by organizing a talk show through IG Live and aimed to promote the tourism potential of regions in Indonesia. Through this, PGJO managed to increase its revenue amid the COVID-19 pandemic (Utami, 2020).

There are 14 companies with declining finances during the pandemic (FAST, JSPT, MAPB, PDES, PANR, PNSE, PGLI, PJAA, SOTS, PZZA, PTSP, SHID, and HELI) that experienced a financial decline, which indicates that the company has a high risk of bankruptcy. The sharp changes experienced by (PJAA) PT Pembangunan Jaya Ancol Tbk as a company whose main income is obtained from the recreation unit have had a heavy impact on the company. Especially since March 2020, the recreation units that are managed have to be closed for about six months, including school holidays, Lebaran, Christmas, and New Year, which are the harvest time for recreation places. As a result, the number of visits to the Taman Impian Jaya Ancol tourist area decreased by 76% from 18 million visitors to 4.5 million visitors in 2020. In the midst of declining financial conditions, the company did not lay off its employees. Management made strategies in dealing with the pandemic situation, including implementing a basic cost strategy, namely that cost expenditures are limited only for the safety of visitors, completing Symphony of the Sea, and rescheduling all projects. This is done so that the costs incurred by the company do not swell. However, the efforts made were not optimal; the company's liabilities were calculated to have increased as of March 31, 2021, to a value of IDR 2.8 trillion from IDR 2.28 trillion in a period of 9 months. The increase in the company's liabilities was due to its decision to issue sustainable bonds II Phase II-2021 worth IDR 731 billion (Nurhaliza, 2021).

The results of this study are in line with research conducted by (Nadiya Nafisamuna & Nurfauziah, 2022) which examines the potential for financial distress with the object of research on food and beverage companies in Indonesia listed on the IDX, which shows the same research results, namely that there is no difference in the company's financial distress. The results of this study are different from research conducted by Saputra dkk., (2022) who conducted research on transportation companies listed on the IDX in 2019 and 2020, the results showed a difference in the level of financial distress that occurred in transportation companies before and during the COVID-19 pandemic. This happens because the time period used is different, namely in the 2nd quarter, so the research results obtained are different, and besides that, the objects and years of research studied are not the same.

The discussion is in line with the agency theory proposed by Berle & Means, (1932), and developed by Jensen & Meckling, (1976) Agency theory addresses a variety of problems that arise. If the agent makes mistakes in decision-making, it will have an impact on the reduced profits obtained in the business being managed. which then results in financial difficulties, also referred to as financial distress (Kartika et al., 2020). COVID-19 is one of the various problems faced by companies. The sustainability of the company is influenced by decisions made by the management and owners of the company. The strategy chosen by the company determines the steps that must be taken to deal with the problems the company has so that the company avoids financial distress. Management plays an important role in determining the decisions taken. Even though there are restrictions on activities due to the pandemic, most companies do not experience changes in financial distress conditions before or during the pandemic. This is because the management and company owners have succeeded in creating a good strategy so that the company can survive in the midst of a pandemic. Meanwhile, companies that have decreased due to a zone change and are classified as having poor health are doing so due to inappropriate decision-making.

IV. CONCLUSION

Based on the research that has been conducted related to the analysis of differences in the level of financial distress before and during the COVID-19 pandemic in restaurant, hotel, tourism, and aviation sub-sector companies on the Indonesia Stock Exchange for the 2019–2022 period, it is concluded that there are no differences in financial distress before and during the COVID-19 pandemic. It can be said that the majority of companies have no findings of differences using the Altman Z-Score model. Although the level of financial distress experienced has increased, most companies are still in the same zone. This is influenced by company management and company owners in making decisions, despite the constraints on activities during the COVID pandemic, the steps taken by the company determine how business processes can run. The company's innovations and strategies in developing its business so that the company can survive the downturn. The COVID pandemic is not the main and only cause of the failure of the company's operations, but the decisions taken by the company are the main determinant of how the company can survive. The existence of a COVID pandemic can be overcome by the accuracy of the strategies taken by several companies. Even before the pandemic came, they were already experiencing poor financial conditions. This statement is also supported by the results of the one-way analysis of variance test, which show a value of 0.885 > 0.05, which means that H0 is accepted and there is no difference in financial distress before and during the COVID-19 pandemic.

In this study, there are several limitations. The first limitation is that this research is limited to the hotel, restaurant, tourism, and aviation sub-sectors, which means that the results of this study cannot be generalized to other company sub-sectors so that future research can make comparisons between company sub-sectors. The second limitation is that this study has a limited observation time until 2022 only, so it is hoped that further research can be conducted over a longer period. The last limitation is that researchers use companies listed on the Indonesia Stock Exchange, so researchers hope that future research can expand coverage to include companies listed on foreign stock exchanges.

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The Effect Of E-Commerce Tax Complexity And Tax Sanctions On Online Marketplace Taxpayer Compliance With Gender As A Modertion Variable

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ABSTRACT

This study aims to determine the effect of e-commerce tax complexity and tax sanctions on online marketplace taxpayer compliance with gender as a moderating variable. This study uses primary data with data collection methods in the form of questionnaires distributed via gform. The population in this study is 2,868,178 e-commerce players in Indonesia (bps.go.id). The sample in this study used the slovin method with a total of 100 respondents. The analysis technique used in this study is SEM-PLS using Smart-PLS. The results of the study show that the complexity of e-commerce taxes has a positive effect on online marketplace taxpayer compliance, tax sanctions have no effect on online marketplace taxpayer compliance. Gender can moderate the complexity of e-commerce taxes on online marketplace taxpayer compliance with a negative relationship. In addition, Gender cannot moderate tax sanctions against online marketplace taxpayer compliance.

Keywords : *Tax Compliance; E-commerce Tax Complexity; Tax Sanctions; Gender*

I. INTRODUCTION

In March 2020, Indonesia was shocked by the corona virus or Covid-19 that entered Indonesia. The impact of the Covid-19 virus is very influential, especially on the Indonesian economy. The virus became the main driver of the monetary emergency (Karina et al., 2021). Lockdown, physical distancing, Large-Scale Social Restrictions (PSBB), and Restrictions on Community Activities (PPKM) are some of the policies used by the Indonesian government to limit community activities to stop the spread of the virus. According to Horas & Purba (2020), this policy had a negative impact on Indonesia's economic growth resulting in a deficit. According to the Central Statistics Agency (BPS), Indonesia's GDP growth shrank by 2.07% in 2020 (c-to-c) when compared to 2019.

Economy and business are two areas of life where Covid-19 has had an impact (Ayu & Lahmi, 2020). Under these conditions, it is hoped that business actors must be able to open up business opportunities and strive to continue their previous business. With online transactions, you can display products with a wider area and make it easier for buyers without having to go to an outlet, as well as efforts to prevent the spread of the Covid-19 virus.

Electronic business (electronic business or e-business) is a business cycle that uses the use of computerized and web innovations in its main tasks (Ayu and Lahmi, 2020). Part of e-business (electronic business), namely e-commerce (electronic commerce) where the buying or selling of goods and services via the Internet. Online business really appeared some time before the Corona virus broke out and brought significant changes to business design and affected the design of individual exchanges (Ayu & Lahmi, 2020).

Indonesia has experienced an increase in e-commerce businesses seen from the E-commerce Statistics by the Central Bureau of Statistics. In 2020 there were 2,361,423 business actors, while in 2021 there were 2,868,178 e-commerce actors (BPS, 2022). Due to the rapid expansion of e-commerce in Indonesia, the DGT tax authority reiterated that traditional transactions and e-commerce are subject to the same tax (Sya'bani, 2016). The object of obligation in online business remains the same as conventional business and the Income Tax Law (UU PPh), the Value Added Goods and Services Act and Sales Tax on Luxury Goods (UU PPN).

Those who sell or supply a value of more than IDR 4.8 billion annually through e-commerce, online storefronts or classified ads will be subject to income tax. In addition, business actors can collect VAT on BKP/JKP on online business exchanges (on goods supplied by sellers or administrations offered by online shops) as Taxable Entrepreneurs (PKP).

In accordance with SE-62/PJ/2013 Circular of the Director General of Taxes regarding the Affirmation of Tax Provisions on E-commerce Transactions, there are four categories of e-commerce, namely online marketplaces, classified ads, daily deals, and online retail. This research is centered on online marketplaces, because web-based businesses of this kind are better known and widely used by the wider community.

To reduce sales tax and ensure tax compliance, the e-commerce industry presents difficulties in identifying income categories, detecting transactions, and closing digital goods or services between countries (Sya'bani, 2016). Based on this case, it can be connected with the theory of attribution which is associated with taxpayer compliance. According to Romadhon & Diamastuti (2020), attribution theory can provide an answer to the question "why", especially when it is associated with an explanation of the behavior of each individual. The Fischer Tax Compliance Model is a thorough analysis of economic, sociological, and psychological factors which include demographic factors, opportunities for non-compliance, attitudes & perceptions, or systems/structures (Prastiwi et al., 2019).

The findings of Siti Farhah et al., (2021) explain that tax complexity, tax penalties, and service quality positively influence ad taxpayer compliance in DKI Jakarta. Tax complexity has an effect on tax issues because of the level of difficulty in interpreting tax regulations, transparency in enforcing regulations, and uniformity are part of tax complexity. Changes to tax laws make it more difficult for taxpayers to understand the regulations, especially when it is assumed that the regulations favor the tax authorities over the taxpayers, affecting how well they comply with the law.

In addition to the complexity of taxes, taxpayers need to know the sanctions that are a means of control. It is anticipated that taxpayer compliance in paying taxes will increase as a result of the government's decision to use tax sanctions as a tax collection standard. According to Siti Farhah et al., (2021) Tax sanctions can encourage taxpayer compliance because they force taxpayers to spend more money than they should to cover the costs of fines, which causes them to lose money.

Social and environmental issues, especially those related to gender, can affect taxpayer compliance. According to the description of attitudes, behavior, and personal characteristics between individual women and men, they are the properties of each individual that can influence decision making (Yasa & Prayudi, 2019). According to the research findings of Prayoga & Yasa (2020), gender has a positive and significant impact on how people intend to behave regarding tax compliance. Female taxpayers tend to be more responsible for their obligations because they are afraid of sanctions that will be imposed if they violate it, while male taxpayers are more willing to take risks than women (Demiral et al., 2020).

This research is to determine the effect of e-commerce tax complexity, and tax sanctions on online marketplace taxpayer compliance. As well as to find out whether gender can moderate the complex relationship of e-commerce taxes or tax sanctions on online marketplace taxpayer compliance. Based on this, the researcher is interested in conducting research entitled "*The Effect of E-Commerce Tax Complexity and Tax Sanctions on Online Marketplace Taxpayer Compliance With Gender as a Moderating Variable*".

II. RESEARCH METHOD

This research uses quantitative descriptive research. The type of data used in this study is primary data with data collection methods in the form of questionnaires distributed via gform.

The population in this study is 2,868,178 e-commerce players in Indonesia. This amount is based on 2022 E-Commerce Statistics data (bps.go.id). Determining the number of research samples using the Slovin formula as follows (Sanusi, 2016: 101):

$$n = \frac{N}{1+N\,(Moe)^2}$$

Where:

n = sample size
N = population size
Moe = Maximum margin of error, is the maximum error rate that can still be tolerated (specified at 10%)

$$n = \frac{N}{1+N\,(Moe)^2} = \frac{2.868.178}{1+(2.868.178\,x\,(0,1)^2}$$

n = 99,99651

Based on the calculation above, it shows that the number of samples is 99.99651. To make it easier to do research, the number of samples is rounded up to 100.

Tax complexity is the difficulty for taxpayers to understand tax legal regulations (Wiyarni et al., 2017). The measurement indicators are that the regulation of tax regulatory articles is not multi-perceived, e-commerce tax regulations are clearly regulated, bookkeeping is burdensome, and tax calculations and bookkeeping can be done easily.

Tax sanctions are sanctions given to taxpayers if they do not fulfill tax obligations in accordance with the provisions of the tax law (Wiyarni et al., 2017). Measurement indicator is justice and deterrent effect.

Taxpayer compliance is a condition where taxpayers are willing to comply and have awareness in acting in accordance with tax regulations without coercion (Prastiwi et al., 2019). Measurement indicator is timely in submitting spt, disclose overall earnings, and never committed a crime in the field of taxation.

Gender is a comparison between men and women which can be defined as personality, behavior, position, responsibility, and habits in dealing with situations that are formed in the social environment. (Prayoga & Yasa (2020). Measurement indicator is Behavior, Emotional characteristics, and Mentality.

This study uses a scale with a range of 1 (strongly disagree) – 10 (strongly agree). This study wants to know whether taxpayer compliance is voluntary or forced. Values 1 to 5 assume that taxpayer compliance is forced, while values 6 to 10 assume that it is voluntary.

The data that has been collected will be analyzed using Partial Least Square (PLS) according to the hypothesis and research design. In this study, three stages were carried out, namely outer model analysis, inner model analysis, and hypothesis testing.

The measurement model (outer model) is used to assess the validity and reliability of the model (Ghozali and Latan, 2015). Inner model testing is done by looking at the relationship between constructs. While the hypothesis test aims to determine the direction of the relationship between endogenous and exogenous variables.

III. RESULTS AND DISCUSSION

Data Description

Of the 100 respondent data used in this study, 40 were male and 60 were female. Data for 33 people aged 17-25, 45 people 26-35 years, 20 people 36-45, and 4 people over 45 years old. Of the 100 respondent data applied in this study, the respondents who mostly chose the online marketplace type Shopee were as much as 58%, Tokopedia 17%, Tiktok shop 12%, Lazada 7%, and others 6%. The education level of SMA is 62 people (62%), SMP is 5 people (5%), S1 is 29 people (29%), and the least number of respondents is S2 is 4 people (4%). The income level of IDR 0 – IDR 60,000,000 is 64 0 people (64%), IDR 60,000,000 – IDR 250,000,000 with a total of 21 people (21%), and income IDR 250,000,000 – IDR 500,000,000 is 15 people (15%).

Descriptive Analysis

Table 1. Variable Descriptive Analysis

	Mean	Min	Max	Standard Deviation
X1.1	5,230	1,000	8,000	1,599
X1.2	5,260	1,000	8,000	1,712
X1.3	5,270	2,000	8,000	1,561
X1.4	5,290	2,000	8,000	1,492
X1.5	5,170	2,000	8,000	1,600
X1.6	5,240	1,000	8,000	1,607
X2.1	4,040	1,000	5,000	1,296
X2.2	3,950	1,000	5,000	1,169
X2.3	3,960	1,000	5,000	1,113
X2.4	3,910	1,000	5,000	1,192
X2.5	3,850	1,000	5,000	1,211
Y1	7,200	3,000	10,000	1,913
Y2	7,350	3,000	10,000	1,931
Y3	7,360	2,000	10,000	1,993
Y4	7,350	2,000	10,000	1,977
Y5	7,260	2,000	10,000	2,008
Y6	7,290	2,000	10,000	1,961
Z1	6,690	2,000	9,000	1,666
Z2	6,700	2,000	9,000	1,803
Z3	6,670	2,000	9,000	1,750
Z4	6,550	2,000	9,000	1,835
Z5	6,530	1,000	9,000	1,717

Data sources processed by researchers, 2023

Based on table 1, it can be seen that the minimum value of the X1 indicator is 1 and the maximum value is 8, the highest mean value is 5.290, the highest standard deviation is 1,1712. The minimum value of the X2 indicator is 1 and the maximum value is 5, the highest mean value is 4,040, the highest standard deviation is 1,296. The Y indicator has a minimum value of 2 and a maximum value of 10, the highest mean value is 7,360, the highest standard deviation is 2,008. The Z indicator has a minimum value of 1 and a maximum value of 9, the highest mean value is 6,700, the highest standard deviation is found in the Z4 indicator of 1,835.

From the tabulation above, the average value of taxpayer compliance is 7,3017. This value shows that taxpayer compliance is voluntary or voluntary compliance.

Outer Model Analysis

Table 2. Outer Loadings Test Results

	X1	X1*Z	X2	X2*Z	Y	Z
X1 * Z		1,361				
X1.1	0,948					
X1.2	0,937					
X1.3	0,946					
X1.4	0,941					
X1.5	0,957					
X1.6	0,941					
X2 * Z				1,087		
X2.1			0,899			
X2.2			0,926			
X2.3			0,925			
X2.4			0,880			
X2.5			0,887			
Y1					0,958	
Y2					0,961	
Y3					0,968	
Y4					0,962	
Y5					0,962	
Y6					0,959	
Z1						0,933
Z2						0,966
Z3						0,957
Z4						0,962
Z5						0,935

Data sources processed by researchers, 2023

It can be observed in table 2 that all indicators have outer loadings values above 0,7 so that in this research model all indicators meet the convergent validity requirements so that they are said to be valid.

Table 3. Internal Consistency Reliability Test Results

	Cronbach's Alpha	Composite Reliability
X1	0,976	0,980
X1*Z	1,000	1,000
X2	0,947	0,957
X2*Z	1,000	1,000
Y	0,984	0,987
Z	0,973	0,979

Data sources processed by researchers, 2023

It can be seen based on table 3, in this study all variables did not have problems in the internal consistency reliability test because the value was above 0,7.

Table 4. Average Variance Extracted (AVE) Test Results

	Average Variance Extracted (AVE)
X1	0,893
X1*Z	1,000
X2	0,817
X2*Z	1,000
Y	0,925
Z	0,904

Data sources processed by researchers, 2023

Based on table 4 it shows that the AVE value has a value above 0.5 so that all variables meet the requirements.

Inner Model Analysis

Table 5. Coefficient Of Determination Test Results (R^2)

	R Square	R Square Adjusted
Y	0,853	0,845

Data sources processed by researchers, 2023

Table 5 shows that the resulting Adjusted R-Square is 0.845. This means that the ability of the independent variables in this study to explain the variance of the dependent variable is 84.5%. Whereas for 15.5% the variable of taxpayer compliance is explained by other factors.

Table 6. Path Coefficients Test Results

	Y
X1	0,499
X1*Z	-0,104
X2	-0,017
X2*Z	-0,022

Data sources processed by researchers, 2023

Based on the table data above, it can be concluded that the effect of e-commerce tax complexity on online marketplace taxpayer compliance has a positive direction as indicated by a value of 0.499. The effect of e-commerce tax complexity on online marketplace taxpayer compliance with gender as a moderating variable has a negative direction with a value of -0.104. The effect of tax sanctions on online marketplace taxpayer compliance has a negative direction as indicated by a value of -0.017. The effect of tax sanctions on online marketplace taxpayer compliance with gender as a moderating variable has a negative direction with a value of -0.022.

Hypothesis Test Results

Table 7. Hypothesis Test Results

	T Statistics (|O/STDEV|)	P Values
X1 -> Y	3,243	**0,001**
X1*Z -> Y	2,438	**0,015**
X2 -> Y	0,384	**0,701**
X2*Z -> Y	0,622	**0,534**
Z -> Y	2,321	**0,021**

Data sources processed by researchers, 2023

The complexity of e-commerce taxes has a significant effect and has a positive direction towards online marketplace taxpayer compliance which is shown with a significance value of 0.001 exceeding the 5% alpha level. Even this is indicated by the value of the T statistic which is 3.243 which exceeds the value of 1.96 (t-table). Therefore, for Ha in this study is acceptable.

The lower the tax complexity, the tax compliance will increase. With higher tax complexity, taxpayer compliance will decrease. So that taxpayers need to know the tax regulations by studying them. Taxpayers need to make an effort to understand thoroughly the tax regulations that apply in Indonesia. Understanding tax laws and regulations by taxpayers is an important component to raise awareness of taxpayers as well as ensure that they comply with their tax obligations.

The complexity of e-commerce taxes has a significant effect and has a negative relationship with online marketplace taxpayer compliance with gender as a moderating variable. The significance value of 0.015 is smaller than the 5% alpha level. Even this is indicated by the value of the T statistic which is 2.438 which exceeds the value of 1.96 (t-table). It can be concluded that Ha is acceptable.

Gender variables can moderate the effect of e-commerce tax complexity on online marketplace taxpayer compliance in a negative direction. That is, the gender moderation variable can weaken the effect of e-commerce tax complexity on online marketplace taxpayer compliance. The low complexity of e-commerce taxes can increase online marketplace taxpayer compliance, but this increase can be reduced by the presence of gender as a moderating variable. The decrease is not significant.

Tax sanctions do not affect and have a negative direction towards online marketplace taxpayer compliance which is shown by a significance value of 0.701 exceeding the 5% alpha level. This is also shown by the value of the T statistic with a magnitude of 0.384 which is smaller than 1.96 (t-table). So that Ha in this study was rejected.

The increase in tax evasion by tax officials and the application of unfair tax sanctions is the cause of non-compliance by taxpayers. The tax penalties given to people who break the law also don't stop them from doing it again. Tax sanctions have not been applied strictly and consistently, this cannot provide a deterrent effect against perpetrators of tax violations and other taxpayers. This happens because government officials have not taken effective steps to deal with these violations, and the tax consequences only apply based on regulations.

Tax sanctions do not affect and have a negative relationship with online marketplace taxpayer compliance with gender as a moderating variable. The significance value of 0.534 exceeds the 5% alpha level. This is also shown from the value of the T statistic which is 0.622 which is smaller than 1.96 (t-table). So that Ha in this study was rejected.

The results of the study show that gender is not able to moderate the effect of tax sanctions on online marketplace taxpayer compliance. This means that gender cannot interact with tax sanctions, and gender does not have a significant impact on taxpayer compliance. In this study, gender is included as a predictor moderating variable, which means that only the moderating variable plays a role as an independent variable in the relationship model formed.

IV. CONCLUSION

Based on the results of the research and discussion that have been put forward by the authors, the conclusions of this study are as follows:

1. The complexity of e-commerce taxes has a significant positive effect on online marketplace taxpayer compliance.
2. Tax sanctions have a negative and insignificant effect on online marketplace taxpayer compliance.
3. Gender can moderate the relationship between e-commerce tax complexity and online marketplace taxpayer compliance in a negative direction.
4. Gender cannot moderate the relationship of tax sanctions to online marketplace taxpayer compliance.

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The Effect Of Gender Moderation Variables On The Independent Board Of Commissioners And The Audit Committee On Tax Aggressiveness

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ABSTRACT

The purpose of this study was analyze independent board of commissioners and audit committee to reduce the act of tax aggressiveness with moderating variables gender diversification. The population in this study is a mining companies listed on the Indonesia Stock Exchange for the period 2018-2021. By using purposive sampling method, 72 mining companies were obtained that meet the research criteria. In this research is moderated regression analysis with SPSS version 25. The results showed that The audit committee variable affects tax aggressiveness. While Independent Board of Commissioners variable has no effect on aggressiveness, and the moderating variable of gender diversification cannot strengthen the independent board of commissioners and the audit committee to minimize tax aggressiveness.

Keywords : Independent Board of Commissioners ; Audit Committee ; Gender ; Tax Aggressiveness

I. INTRODUCTION

According to Law No. 16 of 2009, taxes are compulsory contributions that individuals or corporate taxpayers are obliged to give to the state, which are coercive in nature and do not involve direct compensation. In Indonesia, tax revenues occupy the first position and generate significant funds for development implementation. While taxes may lighten the burden on the government, this differs from the perspective of companies, as they perceive taxes as expenses that can reduce corporate profits. Therefore, companies always strive to optimize their tax burdens in order to achieve maximum profits (Ramadhanty & Didik Ardiyanto, 2022).PricewaterhouseCoopers (PwC) Indonesia says 70% of Indonesia's 40 major mining companies do not use tax transparency reports (Asiatodays, 2022).Sector companies Indonesia's energy mining sector is a strategic and leading sector reinforced by the data that Indonesia is one of the most productive countries in the coal sector mining industry in the world by producing around 485 million tons of coal or 7.2% of all coal production. about 7.2% of all coal production and became the second largest coal exporter after Indonesia.

the second largest coal exporter after Australia (Suwiknyo, 2021). The amount of contributions has not been in accordance with the management of funds in the the mining sector, which is still not transparent enough transparent so that state revenues are still not optimal. According to the *Tax Justice Network,* in 2020, Indonesia was estimated to incur losses of US$ 4.86 billion per year or approximately Rp 68.7 trillion due to tax avoidance (Fatimah, 2020).

The act of evading taxes, whether legally or illegally, is referred to as tax aggressiveness. With the tax collection system in Indonesia based on *self-assessment,* tax audits become an important instrument in the supervision program for ensuring tax compliance obligations. Tax audits are expected to enhance compliance and reduce the level of tax aggressiveness (Damayanti & Prastiwi, 2017). One of the efforts to minimize tax aggressiveness is by implementing the principles of *good corporate governance.* The connection between tax aggressiveness and corporate governance refers to agency theory, which arises due to the diverging interests between *principals* and *agent*s (Setyawan et al., 2019). The division of labor, clarity of functions, and responsibilities within a company should be effectively implemented to maximize corporate governance (GCG). The presence of a supervisory board as the implementer of GCG within a company is expected to reduce instances of tax aggressiveness carried out by the company's management.

The existence of independent board of commissioners, who perform supervisory functions within the company, is expected to be able to exercise control over the performance of management (Effendi, 2009). Independent board of commissioners are external parties to the company who do not have any affiliations with the company members but directly deal with the organizational aspects of the company. The higher the proportion of independent board of commissioners, the expected decrease in tax aggressiveness practices conducted by the company. (Fadhilah, 2014). Setyawan et al. (2019) found that independent commissioners have an influence on tax aggressiveness. When the proportion of independent parties in a company is high, the company's management tends to engage in activities that comply with regulations because the independent parties cannot be influenced by others. However, Sarpingah & Purba (2019) found that the presence of independent commissioners does not have an influence on tax aggressiveness. This research differs from previous studies that focused on manufacturing companies (Setyawan et al., 2019; Sarpingah & Purba, 2019). Based on the discussion, the hypothesis formulated in this study is that independent board of commissioners has an influence on tax aggressiveness.

H_1 = Independent board of commissioners has an influence on tax aggressiveness in mining sector companies listed on the Indonesia Stock Exchange (BEI) during the period 2018-2021.

The independent board of commissioners, in carrying out their duties, is assisted by committees, one of which is the audit committee. The audit committee is a party that supports the performance of the independent board of commissioners by overseeing the performance of the company's management. The presence of an audit committee is expected to ensure that management produces quality information and exercises control to minimize conflicts of interest within the company, including tax avoidance (Purbowati, 2021). The study conducted by Sandra and Maneula (2022) stated that the audit committee variable has a significant positive influence on tax aggressiveness. This indicates that the greater the number of audit committees, the better the company is at overseeing tax regulations. However, different results are revealed by the research conducted by Widuri et al. (2019), which states that an audit committee does not necessarily reduce the likelihood of companies engaging in tax aggressiveness. Based on this explanation, the second hypothesis of the study is as follows:

H_2: The audit committee has an influence on tax aggressiveness in mining sector companies listed on the Indonesia Stock Exchange (BEI) during the period 2018-2021.

In addition to the GCG components implemented by independent board of commissioners and audit committees, having gender diversity among their members also provides additional benefits as a decision-making strategy. Gender diversification refers to the inclusion of both males and females in the composition of board of commissioners and audit committees. Based on theories about women's leadership, women tend to be more cautious and detail-oriented when considering risks, and they also tend to avoid risks. The research conducted by Rahman & Cheisviyanny (2020) has proven that gender diversification has a significant influence on tax aggressiveness. However, the study by Demos & Muid (2020) states that the presence of female board members does not have an impact on tax aggressiveness. Based on these explanations, the third hypothesis of the study is as follows:

H_3: The independent board of commissioners, moderated by gender diversification, has an influence on tax aggressiveness.

Gender diversification among audit committee members, similar to the characteristics of independence, transparency, and caution possessed by women, can make oversight more effective. Therefore, gender heterogeneity within the audit committee is expected to contribute to efforts in reducing tax aggressiveness. The use of gender diversification as a moderating variable is a novelty in this research as it has not been utilized in previous literature. This is based on the findings of previous studies where gender diversification within the audit committee did not have an impact on tax aggressiveness. Therefore, the objective of this research is to determine whether gender, when used as a moderating variable, strengthens or weakens the actions of tax aggressiveness.

H_4: The audit committee, moderated by gender diversification, has an influence on tax aggressiveness.

This study aims to examine and analyze the relationship between independent board of commissioners, audit committees, and tax aggressiveness, moderated by gender, in mining companies listed on the Indonesia Stock Exchange during the period 2018-2021. The mining sector is one of the largest contributors to corporate taxes in Indonesia. The benefits of this research include: (1) providing contributions to further research and adding to the existing body of literature on the influence of independent board of commissioners and audit committees on tax aggressiveness, utilizing gender as a moderating variable. (2) This research is expected to provide practical insights for companies to improve their compliance with tax obligations and ensure they fulfill their responsibility of paying taxes to the state, while avoiding any practices that may harm the country through regular tax reporting. (3) This research is expected to provide information to the government to optimize tax collection and improve the discipline of companies that do not comply with tax regulations.

II. RESEARCH METHOD

The population of this research consists of mining companies listed on the Indonesia Stock Exchange (BEI) during the period from 2018 to 2021. The research sample was obtained using a *non-probability sampling method.* The technique used is *purposive sampling.* It resulted in a population for this research consisting of mining companies listed on the Indonesia Stock Exchange during the period 2018-2021, totaling 63 companies. The total sample size is 18 companies that meet the criteria, resulting in a collection of 72 observation data over the 4-year observation period.

This study utilizes multiple linear regression analysis to examine the relationship between the dependent and independent variables. The following regression model is used in this study:

$$TA = \alpha + \beta DKI + \beta KA + e$$

In this study, analysis for the moderation variable was also conducted using the Moderated Regression Analysis technique. The following equation represents the regression equation that can be used to test moderation:

$$TA = \alpha + + \beta DKI + \beta KA + \beta DKI*GD + \beta KA*GD + £$$

III. RESULTS AND DISCUSSION

This study aims to fill the research gap in previous studies and address the phenomenon of tax aggressiveness that occurs in mining companies in Indonesia. Prior to hypothesis testing, this research first conducts tests of classical assumptions. The results of the testing in Table 1 indicate that there is no correlation among the independent variables in this study, as observed from the tolerance values (> 0.1) and VIF values (< 10) (Ghozali, 2016).

Table 1. Results of Multicollinearity Test

		Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics	
Model		B	Std. Error	Beta	Tolerance	VIF
1	(Constant)	-,224	,164			
	DKI	,020	,094	,025	,986	1,014
	KA	,107	,048	,258	,972	1,029

Heteroscedasticity test was conducted using scatterplot graphs, where the results of the test indicated that the data points are randomly scattered and evenly distributed both above and below the zero line on the Y-axis. Finally, this study utilized the Run-Test (Table 2) and obtained a significance value of 0.235, indicating the absence of autocorrelation issues.

Table 2. Results of Autocorrelation Test

	Unstandardized Residual
Test Value[a]	0,00052
Cases < Test Value	36
Cases >= Test Value	36
Total Cases	72
Number of Runs	32
Z	-1,187
Asymp. Sig. (2-tailed)	,235

The test results for H1 (Table 3) revealed a significance value of 0.829. This indicates that the significance level is above 0.05, leading to the rejection of hypothesis 1. This condition suggests that the presence of independent board of commissioners as a supervisory board does not reduce the tax aggressiveness of the company. Tax aggressiveness actions are complex strategies that require specialized understanding of tax regulations. Essentially, tax aggressiveness exploits loopholes within the numerous tax rules. On the other hand, Independent Board of Commissioners may be less familiar with the tax aggressiveness actions planned by the company's management. This is because the primary focus of the Independent Board of Commissioners is to maintain the relationship between the company's internal and external stakeholders. The findings of this study are consistent with previous research by Yuliani & Prastiwi (2021), which stated that the presence of a larger or smaller number of independent board of commissioners does not guarantee stricter oversight of company management or prevent tax fraud. The existence of a policy regarding the number of independent commissioners may merely serve as a compliance requirement for regulations.

The test results for H2 (Table 3) revealed a significance value of 0.030. This indicates that the significance level is below 0.05, leading to the acceptance of hypothesis 2. The role of the audit committee is to oversee and control the internal control processes and financial reporting. The audit committee's responsibility is to assist the board of commissioners in implementing control measures and ensuring that the company's financial statements are presented fairly in accordance with generally accepted accounting principles. Additionally, the committee oversees and controls the process of preparing the company's financial statements, aiming to minimize manipulation and tax aggressiveness actions. The audit committee has the responsibility of controlling managers in enhancing the company's profit growth, where managers tend to emphasize cost reduction, especially in taxes (S.T. Tahilia et al., 2022). In this study, the audit committee is found to have an influence on tax aggressiveness. This is because the audit committee has the responsibility to control the process of preparing financial statements to prevent potential fraudulent activities by management. The audit committee also actively participates in making decisions related to tax burdens since tax burdens are closely related to tax aggressiveness. Consistent with the study by Ardillah & Vanessa (2022), which showed results indicating that the audit committee has a positive influence on tax aggressiveness, using the measurement of Book Tax Difference.

Table 3. Results of Hypothesis Testing

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig
1	(Constant)	-,224	,164		-1,365	,177
	DKI	,020	,094	,025	,217	,829
	KA	,107	,048	,258	2,221	,030

The results of H3 test (Table 4) indicate that the gender diversity variable in moderating the relationship between independent board of commissioners obtained a significance level of 0.255, which means that the value is much higher than 0.05. This indicates that hypothesis 3 is rejected, thereby demonstrating that the gender diversity variable cannot strengthen the relationship between independent board of commissioners in reducing tax aggressiveness. The presence of female board members does not determine the effectiveness of oversight over company management. The findings of this study are consistent with the research conducted by Demos & Muid (2020) and Francis et al. (2014), which stated that the presence of female board members does not have an influence on corporate tax aggressiveness.

The results of H4 test (Table 4) indicate that the gender diversity variable in moderating the relationship between the audit committee obtained a significance value of 0.076, which means that the value is above 0.05. This indicates that hypothesis 4 is rejected, thus demonstrating that the gender diversity variable cannot strengthen the relationship between the audit committee in reducing tax aggressiveness. This study aligns with Deslandes et al. (2020), stating that gender diversity in the audit committee does not have an influence on tax aggressiveness.

Table 4. Moderated Regression Analysis Test

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	,014	,003		5,111	,000
	X1_Z	-,010	,009	-,247	-1,149	,255
	X2_Z	,004	,002	,388	1,806	,076

IV. CONCLUSION

The phenomenon of tax aggressiveness continues to be a primary focus of various researchers. This study indicates that gender The independent board of commissioners and the audit committee's influence on tax aggressiveness cannot be maximized by the presence of women in these positions. This is also supported by the facts in the field that can be seen from the financial statements of mining companies that are used as objects in this study that the existence of the board of commissioners and the audit committee of women is still very small. This study has limitations due to the lack of previous research sources on the moderation variable of gender in independent board of commissioners and audit committee. Subsequent research can improve upon this study by using a sample of companies from sectors other than mining, such as the manufacturing sector, with a larger sample size. Diversity cannot moderate the influence of the board of commissioners.

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