The Effect Of Board Diversity and Audit Quality on Earnings Quality (Study on Non-Financial State-Owned Enterprises Listed on the Indonesia Stock Exchange for the 2016-2020 Period)

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Abstract

Earnings quality is the ability of earnings to describe the actual state of the company's profits, able to estimate future profits, and as a review when making decisions. There is several factors that affect earnings quality, namely board diversity (presence of female directors, age diversity of the board of directors, educational background of members of the board of directors, proportion of independent commissioners) and audit quality. This study aims to determine how the influence of the presence of female directors, age diversity of the board of directors, educational background of members of the board of directors, the proportion of independent commissioners and audit quality on earnings quality. This study uses quantitative methods. Non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period are the population in this study. There are 16 companies that are used as research samples through a purposive sampling method. In this study, panel data regression analysis was used as a data analysis method and used eviews 12 software. Results showed that the presence of female directors, the diversity of the age of the board of directors, the educational background of the members of the board of directors, the proportion of independent commissioners and the quality of the audit simultaneously affected earnings quality. Partially, the educational background of the board of directors and audit quality affect earnings quality, while the presence of female directors, the age diversity of the board of directors and the proportion of independent commissioners have no effect on earnings quality.

Keywords
Audit Quality, Board Diversity, Earnings Quality, Female Directors, Proportion of Independent Commissioners.

1. Introduction

Earnings quality is the ability of earnings to show the truth related to company profits and help predict future earnings by paying attention to the stability and persistence of earnings. In taking decisions, investors see the earnings quality of the company (Pamela and Geraldina 2021). Earnings quality is the quality of publicly available earnings information which can show the extent to which profit can affect decision making decisions (Wulansari 2013). Earnings quality is the key characteristic financial reporting that is useful for resource location decisions for investors or other owners of capital. Based on this, information regarding earnings quality is very important because the information will increase the results decision to be taken. This study measures earnings quality using the formula discretionary accruals. Through the discretionary accrual approach, reveals the existence of earnings management, and can be used as the opposite in measuring earnings quality. If the value of discretionary accruals is getting lower, then the company can be said to have higher earnings quality (Schipper and Vincent 2003). High discretionary accruals indicate the quality of earnings generated by the company is low due to opportunistic actions a person or company management to influence information presented by utilizing the rules allowed by the standard accountancy.

Agency conflict and earnings quality are two things that have influence on each other. Agency conflict can lead to the nature of management reporting earnings in opportunities to maximize their personal interests, and if that happens, the quality of earnings will be low (Triwahyuni 2017). This conflict can be minimized with good corporate governance. The application of corporate governance can be used as a guide for company management to manage the company well, assisting them in make decisions that benefit all parties. One component of good corporate governance is the diversity of the board of directors or board of directors. Board diversity is often defined as the personal division between interdependent work unit members. Board Diversity in corporate governance will have a positive influence because the more diverse directors are expected to limit earnings management activities which will reduce the quality of income diversity in committee basically depends on the degree of similarities and differences between the people in forming the board. This study uses 4 aspects of board diversity including the presence of female directors, age diversity of directors, educational background of members of the board of directors and the proportion of independent commissioners. In addition to good governance, these conflicts can be avoided by maintaining the quality of the company's audits. Audit has a role as a process in reducing discrepancies in information that exists between managers and shareholders by using outside parties in providing validation of financial statements (Andriani and Nursiam 2018).

Research conducted by Nasution and Jonnergård (2017), Hoang (2017) and Irwansyah (2020) states that the presence of female directors does not affect earnings quality, while research conducted by Daryatno and Santioso (2021) and Nurbach (2019) states the presence of women in directors proved to have a positive and significant effect on earnings quality. Research conducted by Irwansyah (2020) and Hutapea (2019) shows that the age diversity of directors has no effect on earnings quality, and there is no empirical evidence that reveals the effect of the age of directors on earnings quality. Research conducted by Hutapea (2019) revealed that the greater the proportion of board members with economic and business education backgrounds, it does not affect earnings quality and there is no empirical evidence that shows the influence of background directors' education on earnings quality, encouraging researchers to conduct research on this relationship. Research that conducted by Panhuri and Cahyaningsih (2021) revealed that the independent board of commissioners has an effect on earnings quality. While research conducted by Yanto and Metalia (2021) and Sugianto and Sjarief (2018) revealed that independent commissioners have no effect on earnings quality. Research conducted by Anggrainy and Priyadi (2019) and Puteri and Saraswati (2021) reveals that audit quality has no effect on earnings quality. Research conducted by Wijaya (2020) and Hartoko and Astuti (2021) revealed that audit quality affects earnings quality. Based on the inconsistency of the results of previous studies and the phenomena that occur, the authors are interested in conducting research on variables related to earnings quality. The title of this study is "The Effect of Board Diversity and Audit Quality on Earnings Quality (Study on Non-Financial State-Owned Enterprises Listed on the Indonesia Stock Exchange for the 2016-2020 Period)".

1.1 Objectives

This study aims to determine how the influence of women, board age diversity, board member background, proportion of independent commissioners and audit quality on the quality of non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period either simultaneously or partially. The results of this study will be a good reference and can be re-examined using other independent variables that can explain the quality of earnings and research back with the latest time span.

2. Literature Review

Earnings quality is the level of difference between reported net income and actual earnings, so that high-quality earnings reflect the company's actual financial performance and cannot be manipulated (Yanto and Metalia 2021). Earnings quality is earnings that can be used to accurately assess current performance and can be used as a basis for predicting future performance (Narita and Taqwa 2020). Meanwhile, according to Fathussalmi (2019), quality earnings are profits that can reflect sustainable profits in the future, profits consist of accrued costs and cash which reflect the company's actual financial performance. Based on the above definition, it can be said that earnings quality is a benefit that is accurately expressed as an assessment of the company's performance in the future and is a source of information when making decisions for users of financial statements. Earnings quality in this study uses the Jones Modified Model using the absolute value of discretionary accruals. Board diversity or the distribution of board members is one of the issues related to corporate governance. Board diversity can be divided into two, namely the diversity of the board that can be observed such as gender, race, age, and nationality and the second is cognitive that cannot be observed such as expertise and experience. The division of individuals among members who are interdependent in a work unit is called board diversity (Septiane and Suzan 2021). According to Kristina and Wiratmaja (2018), the implementation of board diversity in a company will provide positive information to investors because the company has implemented and implemented good governance.

The presence of female directors is the proportion of the presence of women on the board of commissioners and the board of directors who can influence governance within a company. (Alamsyah and Madyan, 2021). The Board of Directors is a corporate organ that has collegiate duties and responsibilities regarding the management of the company. The presence of women on the board of directors implies that the company provides opportunities and opportunities the same for every individual without discrimination (Septiane and Suzan, 2021). In addition, women have a high degree of caution and thoroughness so they tend to be risk averse (Yogiswari and Badera, 2019). The indicator to calculate the presence of female directors is by dividing the number of female directors by the total number of directors. Age can be seen as a measure of board experience and risk taking. The young age of the board of directors brings positive information to investors because it means risk and courage to take new ideas for the survival of the company. Young board of directors are more daring in the risk-taking process and tend to always have new ideas, so the company can experience significant growth or improvement higher when compared to the older age of the board of directors. Age diversity is measured using the ratio of young directors to the number of directors.

Educational background is one of the important and useful things for everyone, especially in leading and managing a company (Yogiswari and Badera 2019). If the board of directors has a background in economics and business education, it means that board members have better performance in business management and investment making (Septiane and Suzan 2021). The educational background of the board of directors can affect the knowledge it has, it would be better if the educational background is business and economics because it will be easier to manage the business world. The measurement of the educational background of the members of the board of directors in this study is to divide the number of directors who have an economic and business educational background by the total number of directors. Commissioner Independent is very much needed for companies that really need an independent commissioner. The independent commissioner of the company must not have a personal relationship with the major shareholders or other members of the board of directors. The duty of the independent commissioner is to be able to make an effective contribution to the final quality of the company's financial statements or may be free from fraud, the independent commissioner can also act as a mediator in disputes between the company's internal managers and can also oversee the policies to be taken by management and provide direction (Pratomo and Rana 2021). The measurement of the proportion of independent commissioners in this study is to divide the number of independent commissioners by the total number of commissioners.

Audit quality can also be interpreted as the possibility of the auditor finding and disclosing deviant behavior in the auditee's accounting system, where the possibility of "finding" is obtained from the competence and expertise of the auditor while the results of the report are determined by the level of auditor independence. Audit quality is the implementation of an audit in accordance with auditing standards so that it can be disclosed and reported in the event of a violation by the auditee. Audit quality is an opportunity that a competent auditor will be able to understand and carry out audit procedures correctly and report independently in case of deviations (Minerva et al. 2020). Audit quality in this study was measured by auditor competence using a dummy variable of 1 for companies audited by The Big Four Public Accounting Firms and 0 for companies audited by Non The Big Four Public Accounting Firms.

3. Methods
The method used in this research is the method quantitative. Quantitative methods are quantitative research that has a firm and orderly structure, so the stages from the beginning to the end of the research can be predicted. Quantitative research, on the other hand shows that numbers are needed, starting with data collection, data interpretation, and presentation of results. Presenting results in the form of pictures, tables, graphs, or other distinctive displays increase the reader's absorption and facilitate communication (Hardani 2020). The research strategy in this study uses a case study. Case Study is a strategic research, empirical study that finds out and examines a phenomenon in real life. Case study is one of quantitative variance. In the case study, both descriptive and parametric statistical methods will be used as a condition and process for testing the hypothesis. The object in this study is a non-financial state-owned company listed on the Indonesia Stock Exchange in the 2016 – 2020 period. This study uses a data regression analysis panel. Panel data is a combination of time series data and cross sectional data. According to Sugiyono (2018) time series data is data that is collected several times in relatively the same time interval, using the same instrument and the same object. Meanwhile, cross sectional data is data collected from the same or different objects, but in unequal time intervals.

4. Data Collection
The type of data used in this research is secondary data. Secondary data is a source that does not directly provide data to data collectors, for example data obtained or processed through documents (Sugiyono 2018). The secondary data collection method is called desk research, namely data can be obtained from libraries, bookstores, companies or institutions that publish research reports, namely data: Annual reports and financial statements of non-State Owned Enterprises listed on the Indonesia Stock Exchange or official websites for the period 2016 – 2020Previous research that supports this research, Books that support this research.

5. Results and Discussion
5.1 Descriptive statistics
The variables analyzed in this study consisted of the dependent variable and the independent variable. The dependent variable in this study is earnings quality. While the independent variable in this study is board diversity (presence of female directors, age diversity of the board of directors, educational background of members of the board of directors, and proportion of independent commissioners), and audit quality. The type of data used in this study is panel data which is a combination of cross section and time series. The data used in this study were obtained from financial reports and annual reports of non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period are the population in this study. The total observations used in this study were 80 data consisting of 16 companies with a study period of 5 years. However, there are some data that cannot be used due to the results testing cannot be used for decision making. Therefore, the researcher conducted an outlier test using Excel by looking at the studentized value residuals. Extreme data will have a studentized residual value of more than 3 or less than -3. Extreme data will be excluded from the observations. The outlier data in this study were 2 observations, so that the total observations after outlier test as many as 78 observations. Here are the results of the descriptive statistical tests in table 1 below.

Table 1. Descriptive Statistics Test Results

Mean	0,0007989	0,04553	0,09294	64%	38%
Maximum	0,0044916	0,33333	0,33333	100%	60%
Minimum	0,0000029	0,00000	0,00000	17%	25%
Std. Dev.	0,0010107	0,07968	0,10169	19%	8%

Based on table 1 shows that the quality of earnings in 2016-2020 as measured using discretionary accruals has an average value (mean) of 0.000799 and a standard deviation of 0.001011. This means that the data are not grouped or varied because the mean value is smaller than the standard deviation. The variable presence of female directors has an average value (mean) of 0.04553 and a standard deviation of 0.07968. That is, the data is not grouped and varies because the mean value is smaller than the standard deviation. The variable of age diversity of the board of directors has an average value (mean) of 0.09294 and a standard deviation of 0.10169. That is, the data is not grouped and varies because the mean value is smaller than the standard deviation. The educational background variable for the members of the board of directors has an average (mean) of 64% and a standard deviation of 19%. That is, the data is grouped and does not vary because the mean value is greater than the standard deviation. The variable proportion of independent commissioners has an average (mean) of 38% and a standard deviation of 8%. That is, the data is grouped and does not vary because the mean value is greater than the standard deviation.

Table 2. Audit Quality Descriptive Statistics

	Frequency	***Percent***
Public Accounting Firm non The Big 4	32	41,0
Public Accounting Firm The Big 4	46	59,0
Total	78	100,0

The audit quality variable in this study is a nominal scale variable. Table 2 shows that in non-financial State-Owned Enterprises companies listed on the Indonesia Stock Exchange in the 2016–2020 period, with a total of 78 samples, there were 32 samples that were not audited by public accounting firms The Big Four (41%) and there were 46 sample audited by public accounting firm The Big Four (59%). Overall, the results of audit quality show that more than half of the sample companies are audited by The Big Four public accounting firms. This means that non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange use the Big Four public accounting firms to audit their companies.

5.2 Classic assumption test

1) Multicollinearity Test

Based on the results of the classic assumption test that the multicollinearity/VIF value is less than 10. Therefore, it can be interpreted that the regression model does not have a correlation between independent variables or there is no multicollinearity

2) Heteroscedasticity Test

Based on the results of heteroscedasticity testing through the glejser method, it shows a value of 0.0507 which is greater than 0.05. Thus the regression model used does not show symptoms of heteroscedasticity and is feasible to predict earnings quality based on the independent variables, namely the presence of female directors, age diversity of directors, educational background of members of the board of directors, proportion of independent commissioners and audit quality.

5.3 Panel Data Regression Model Selection

1) Chow test

Based on the results of the Chow test calculation, the chi-square probability value is 0.0036 <0.05. Therefore, the most appropriate model to use is the fixed effect model. Furthermore, testing is carried out for the selection of models between fixed effects and random effects using the Hausman test.

2) Hausman test

Based on the results of the Hausman test, the random cross section probability value was 0.4812 > 0.05, so the Random Effect Model was chosen. Furthermore, testing is carried out for the selection of models between random effects and common effects using the Lagrange Multiplier test

3) Lagrange Multiplier Test

Based on the results of the Lagrange multiplier test, the Breusch-Pagan probability value is 0.1167 > 0.05, so the most appropriate model to use is the common effect model. Based on this, the most appropriate panel data regression model used for this research is the common effect model.

5.4 Panel Data Regression Model Research Results

Based on the testing of the three models, the most appropriate model used in this study is the Common Effect Model. However, the researcher found outlier data from 2 companies that had discretionary accruals above the average so that the researchers excluded 2 companies in that year in data processing, because it could bias the results of the test. The following table shows the results of the common effects model testing that has been carried out using the Eviews 12 software after removing 2 companies that have outlier data.

Table 3. Common Effect Model Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000830	0.000198	4.193626	0.0138
X1	-0.000246	0.000307	-0.801404	0.4678
X2	-7.13E-05	0.000365	-0.195326	0.8547
X3	-0.000300	4.74E-05	-6.336229	0.0032
X4	0.000649	0.000413	1.569945	0.1915
X5	-0.000524	0.000156	-3.366288	0.0281
Weighted Statistics				
Root MSE	0.000812	R-squared		0.193134
Mean dependent var	0.000915	Adjusted R-squared		0.137102
S.D. dependent var	0.000813	S.E. of regression		0.000845
Sum squared resid	5.14E-05	F-statistic		3.446834
Durbin-Watson stat	1.343385	Prob(F-statistic)		0.007549
Unweighted Statistics				
R-squared	-0.013876	Mean dependent var		0.000799
Sum squared resid	7.98E-05	Durbin-Watson stat		1.365839

Based on table 3, the panel data regression equation is obtained. The following is the panel data regression equation in this study.

Y = 0.000830 - 0.000246X1 - 7.13E-05X2 - 0.000300X3 + 0.000649 X4 - 0.000524X5 + e

Information:

Y = Earnings Quality, X1 = Presence of Female Directors, X2 = Age Diversity of the Board of Directors, X3 = Educational Background of Board of Directors, X4 = Proportion of Independent Commissioners, X5 = Audit Quality, e = error term

Based on table 3, the probability value (F-statistic) of 0.007549 is smaller than 0.05. Therefore, the independent variables, namely the presence of female directors, the age diversity of the board of directors, the educational background of the members of the board of directors, the proportion of independent commissioners and audit quality have a simultaneous effect on the dependent variable, namely earnings quality. Based on table 8, it can be concluded that the effect of the independent variable on the dependent variable is partially. The following is a description of the influence of the independent variable on the dependent variable partially.

1. The influence of the presence of female directors on earnings quality: the variable presence of female directors has a probability value of 0.4678. The value is greater than 0.05. Therefore, it can be concluded that the presence of female directors has no effect on earnings quality in non-financial State-Owned Enterprises companies listed on the Indonesia Stock Exchange in 2016-2020
2. The effect of the age diversity of the board of directors on earnings quality: the variable of age diversity of the board of directors has a probability value of 0.8547. The value is greater than 0.05. Therefore, it can be concluded that the age diversity of the board of directors has no effect on the earnings quality in non-financial State-Owned Enterprises companies listed on the Indonesia Stock Exchange in 2016-2020
3. The effect of the educational background of members of the board of directors on earnings quality: the educational background variable for the members of the board of directors has a probability value of 0.0032. The value is smaller than 0.05. Therefore, it can be concluded that the educational background of the members of the board of directors affects the earnings quality in non-financial State-Owned Enterprises companies listed on the Indonesia Stock Exchange in 2016-2020

4. The effect of the proportion of independent commissioners on earnings quality: the variable proportion of independent commissioners has a probability value of 0.1915. The value is greater than 0.05. Therefore, it can be concluded that the proportion of independent commissioners has no effect on the earnings quality in non-financial State-Owned Enterprises companies listed on the Indonesia Stock Exchange in 2016-2020
5. The Effect of audit quality on earnings quality: the audit quality variable has a probability value of 0.0281. The value is smaller than 0.05. Therefore, it can be concluded that audit quality affects earnings quality in non-financial State-Owned Enterprises companies listed on the Indonesia Stock Exchange in 2016-2020

Based on table 3, the Adjusted R-Squared value is 0.137102 or 13.7%. This shows that the ability of the independent variables consisting of the presence of female directors, the age diversity of the board of directors, the educational background of the members of the board of directors, the proportion of independent commissioners and audit quality in explaining the dependent variable, namely earnings quality is 13.7%, while the rest is explained by other variables not examined by researchers.

5.5 Discussion

1) The Influence of the Presence of Female Directors on Earnings Quality

Table 4. The Relationship between the Presence of Female Directors and Earnings Quality

Presence of Female Directors	Earnings Quality Below Average (>0.000799)	Earnings Quality Above Average (<0.000799)	Total
Presence of Female Directors above Average (>0.0453)	4 (5%)	17 (22%)	21
Presence of Female Directors Below Average (<0.0453)	19 (24%)	38 (49%)	57
Total	23	55	78

Table 4 shows that non-financial State Enterprise companies on the Indonesia Stock Exchange for the 2016-2020 period there are 4 observations that have a relationship with the presence of female directors above average with earnings quality below average, while the number of observations that have a relationship with the existence of female directors is below average. above average female directors with earnings quality above average as many as 17 observations. In addition, there are 19 observations that have a relationship between the presence of female directors below average and earnings quality below average and 38 observations that have a relationship between the presence of female directors below average and earnings quality above average. From the table, it shows that the presence of female directors above the average or below the average will continue to improve earnings quality, meaning that the presence of female directors or not will not affect earnings quality.

Based on table 4 the highest correlation occurs between the presence of female directors below the average and earnings quality above the average as many as 38 observations or 49% of all observations. This shows that 38 observations have a low level of presence of female directors and have high earnings quality. This means that companies that have below average female directors have a high level of earnings quality or the presence of female directors will not affect the implementation of earnings quality in a company. Based on the partial test results in table 3, the variable presence of female directors has a significance value of 0.4678 which is greater than 0.05 so that the presence of female directors has no effect on earnings quality.

Women in facing risk preferences tend to avoid risk (risk averse) which will make it easier to take careful and low risk steps, it will make more informed and low-risk decisions, compared to men who tend to take risks (risk takers) (Septiane and Suzan 2021). The presence of female board members is considered to be able to improve the quality of earnings, because with the presence of women on the board of directors it is stated that the company makes better decisions with minimal risk. Thus, it will create a good reputation for the company from the market or investor point of view. Implementing good governance is one way to improve the quality of the company's earnings. This shows that there is no problem with having women on the board of the company. The results of this study do not support the theory in the thinking and research framework of Nurbach et al. (2019), that companies that have a female gender in top level management can have a good influence on improving the quality of company profits.

To minimize risk in decision making, women have the positive qualities needed in financial reporting, and fraud can occur. This study does not support this because in this study, not all state-owned companies listed on the IDX in 2016-2020 have female members of the board of directors. Companies that have a female board of directors are only two of the total number of members of the board of directors, so it can be said that the diversity of the female board of directors has not shown a significant influence in determining the quality of company earnings. This is in line with the research of Hamdani and Hatane (2017) and Irwansyah (2020) which state that the proportion of women who serve on the board of directors is only 9.9% compared to men. Similarly, what happened in other developed countries in Asia such as Hong Kong with the proportion of women in top management of 10.3%, China 8.5%, Singapore 7.3%, and Japan 1.1%. There are still few women who are placed in top positions due to the different views on the causes of success achieved by men and women. Men's success is considered to be due to high ability (in terms of talent or intelligence), while women's success is considered to be due to luck.

2) The Effect of Age Diversity of the Board of Directors on Earnings Quality

Table 5. The Relation of Age Diversity of Directors to Earnings Quality

Age Diversity of the Board of Directors	Earnings Quality Below Average (>0.000799)	Earnings Quality Above Average (<0.000799)	Total
Above Average Age Diversity of the Board of Directors (>0.09294)	10 (12%)	27 (35%)	38
Age Diversity of the Board of Directors Below Average (>0.09294)	13 (17%)	28 (36%)	40
Total	23	55	78

Table 5 shows that non-financial State-Owned Enterprises on the Indonesia Stock Exchange for the 2016-2020 period there are 10 observations that have a relationship with the age diversity of directors above average with below average earnings quality, while the number of observations that have a correlation above average age diversity of directors with above average earnings quality as many as 27 observations. In addition, there are 13 observations that have a relationship between below-average age diversity of directors and below-average earnings quality and 28 observations that have a relationship between below-average age diversity of directors and above-average earnings quality. From the table, it shows that the presence of young directors above the average or below the average will continue to improve the quality of earnings, meaning that the presence of young directors or not will not affect the quality of earnings. Based on table 5, the highest correlation occurs between the age diversity of the directors below the average and the earnings quality above the average as many as 28 observations or 36% of the total observations. This shows that 28 observations have a low level of diversity in the age of directors and have high earnings quality. This means that companies with below-average age diversity of directors have a high level of earnings quality or the presence of age diversity will not affect the application of earnings quality in a company. Based on the partial test results in table 3 the variable age diversity of directors has a significance value of 0.8547 which is greater than 0.05 so that the age diversity of directors has no effect on earnings quality.

Younger directors are willing to take risks and tend to always have new ideas, so the company can experience higher growth than older directors. This is because older directors are more concerned with financial security and the company's career. With the diversity of ages among board members, it is hoped that the decisions taken will be made better and produce good quality profits (Putri 2020). The results of this study do not support the theory in the framework of thought because the data in this study has a predominance of the age of members of the board of directors aged 50 years and over. This seems to indicate that the presence of young people in the boardroom is partly due to the nature of companies listed in Indonesia being mostly family controlled. In addition, age can also be considered as a proxy for level of experience and mode of risk taking. This research is in line with the research of Irwansyah (2020) which reveals that young managers are more likely to undertake risky strategies and will experience higher growth than their counterparts with older managers. Older managers tend to be more risk averse and "perhaps at a point in their lives where financial security and career security are important". In addition, younger boards will be more positively associated with strategic change and more willing to participate in the monitoring process.

3) The Effect of Educational Background of Members of the Board of Directors on Earnings Quality

Table 6. The Relation of Educational Background of the Board of Directors to Earnings Quality

Educational Background Member of the board of directors	Earnings Quality Below Average (>0.000799)	Earnings Quality Above Average (<0.000799)	Total
Educational Background Above average (>64%)	15 (19%)	31 (40%)	46
Educational Background Below Average (<64%)	8 (10%)	24 (31%)	32
Total	23	55	78

Table 6 shows that non-financial State-Owned Enterprises on the Indonesia Stock Exchange for the 2016-2020 period have 15 observations that have an above average economic and business education background for members of the board of directors with below average earnings quality, while the number of observations related to the economic and business educational background of members of the board of directors is above average with earnings quality above the average as many as 31 observations. In addition, there are 8 observations that have a relationship with the economic and business educational background of members of the board of directors below average with below average earnings quality and 24 observations that have a relationship with the economic and business educational background of members of the board of directors below. average with earnings quality above average.

Based on table 6, the highest correlation occurs between the economic and business educational background of the members of the board of directors above average with earnings quality above the average as many as 31 observations or 40% of all observations. This shows that 31 observations have a high level of economic and business education background for members of the board of directors and have high earnings quality. This means that 46 companies with an above average economic and business education background are greater than 32 companies with a below average economic and business education background. Of the 46 companies, 31 (40%) have earnings quality above average and 31 (40%) are higher than 15 (19%) with earnings quality below average. Therefore, the existence of an economic and business educational background for members of the board of directors will affect the implementation of earnings quality in a company because it reduces discretionary accruals. Based on the partial test results in table 3, the variable of economic and business education background of members of the board of directors has a significance value of 0.0032 which is smaller than 0.05 so that the economic and business education background of members of the board of directors affects earnings quality.

The educational background of members of the board of directors is one measure or benchmark in board diversity. It would be better if the members of the board of directors have an educational background related to business and economics. The educational background of the board of directors if it is in accordance with the field being worked on will be more effective and efficient in making the right decisions in managing the company, of course, it will affect the quality of earnings (Septiane and Suzan 2021). Company executives who have better information about the company will be motivated to disclose that information to investors. Likewise, the board of directors who have a background in business and economic education are expected to have more roles in directing the direction of the company's business. So that it will produce quality profits.

The results of this study are in line with the theory in the framework of thought because in this study it was found that the board of directors had more business economic education backgrounds, thus affecting the application of earnings quality in the company. This research is an empirical study which reveals that the educational background of directors affects earnings quality, because Hutapea (2019)'s research reveals that there is no empirical research on the relationship between background studies and earnings quality. Research conducted by Hutapea (2019) revealed that the economic and business educational background of members of the board of directors had no effect on earnings quality. Thus, no previous research has been found that is in line with this research.

4) The Influence of the Proportion of Independent Commissioners on Earnings Quality

Table 7. The Relationship of Independent Commissioners with Earnings Quality

Proportion of Independent Commissioners	Earnings Quality Below Average (>0.000799)	Earnings Quality Above Average (<0.000799)	Total

Proportion of Independent Commissioners above Average >38%	9 (11%)	24 (31%)	33
Proportion of Independent Commissioners Below Average <38%	14 (18%)	31 (40%)	45
Total	23	55	78

Table 7 shows that non-financial State-Owned Enterprises on the Indonesia Stock Exchange for the 2016-2020 period there are 9 observations that have a relationship with the proportion of independent commissioners above average with below average earnings quality, while the number of observations that have the relationship between the proportion of independent commissioners above the average with earnings quality above the average is 24 observations. In addition, there are 14 observations that have a relationship between the proportion of independent commissioners below average and earnings quality below average and 31 observations that have a relationship between the proportion of independent commissioners below average and earnings quality above average. flat.

From the table, it shows that having an independent commissioner above the average or below the average will continue to improve earnings quality, meaning that the presence of an independent commissioner or not will not affect earnings quality. Based on table 7, the highest correlation occurs between the proportion of independent commissioners above the average and earnings quality above the average as many as 31 observations or 40% of all observations. This shows that 31 observations have a low proportion of independent commissioners and have high earnings quality. That is, companies that have a below average proportion of independent commissioners have a high level of earnings quality or the presence of a proportion of independent commissioners will not affect the implementation of earnings quality in a company. Based on the partial test results in table 3, the variable proportion of independent commissioners has a significance value of 0.1915 which is greater than 0.05 so that the proportion of independent commissioners has no effect on earnings quality.

An independent commissioner is one of the implementations of good corporate governance in a company that has the task of supervising and controlling the performance of the management and ensuring that management does not deviate from the applicable regulations. The independent board of commissioners comes from parties who have no ties to members of the board of directors, major shareholders, and other members of the board of commissioners with the aim of producing a quality financial report composition. Thus, it can be concluded that the higher the proportion of independent commissioners, the greater the quality of the company's earnings (Panhuri and Cahyaningsih 2021). The results of this study do not support the theory in the framework and research conducted by Panhuri and Cahyaningsih (2021) which reveals a positive relationship between the proportion of independent commissioners and earnings quality.

This happens because in this study the data shows that the composition of the affiliated commissioners is much larger than the independent commissioners, so it does not affect the implementation of earnings quality in the company. The results of this study are in line with the research of Sri (2021) and Shanti (2018) which state that there is no effect of the proportion of independent commissioners on earnings quality which reveals that if independent commissioners are not the majority on the board of commissioners, policy making will be dominated by affiliated commissioners. This shows that the existence of independent commissioners in the company is only a symbol of the implementation of good corporate governance so that investors believe that the company will produce reliable information or reports, thus giving a positive signal to investors, and it can be indicated that affiliated parties in the company are more dominate and be able to control, this will have an impact on the performance of the independent commissioner functioning as a supervisor for every management action to be not optimal, thereby reducing the objectivity and independence of the report.

5) The Effect of Audit Quality on Earnings Quality

Table 8. The Relationship between Audit Quality and Earnings Quality

Audit Quality	Earnings Quality Below Average (>0.000799)	Earnings Quality Above Average (<0.000799)	Total
Companies audited by The Big 4 Public Accounting Firm (1)	17 (22%)	29 (37%)	46

Companies not audited by The Big 4 Public Accounting Firm (0)	6 (8%)	26 (33%)	32
Total	23	55	78

Table 8 shows that non-financial State-Owned Enterprises on the Indonesia Stock Exchange for the 2016-2020 period there are 17 observations that have an above average audit quality relationship with below average earnings quality, while the number of observations that have a quality relationship above average audit with above average earnings quality as many as 29 observations. In addition, there are 6 observations that have audit quality below average with earnings quality below average and 26 observations that have a relationship between audit quality below average and earnings quality above average. Based on table 8, the highest correlation occurs between audit quality above average and earnings quality above average as many as 29 observations or 37% of all observations. This shows that 29 observations have a high level of audit quality and have high earnings quality. This means that 46 companies audited by The Big 4 Public Accounting Firm have a larger number compared to 32 companies that are not audited by The Big Four Public Accounting Firm. Of the 46 companies, 29 (37%) have above-average earnings quality and 29 (37%) are higher than 17 (22%) with below-average earnings quality. Therefore, having a company audited by The Big Four Public Accounting Firm will affect the implementation of earnings quality in a company because it reduces discretionary accruals. Based on the partial test results in table 3, the audit quality variable has a significance value of 0.0281 which is smaller than 0.05 so that audit quality affects earnings quality.

Quality audits are needed to prevent earnings management from occurring. The existence of a qualified auditor will increase the possibility of detecting earnings management practices so as to reduce the tendency of company management to carry out earnings management which will reduce the quality of earnings. Therefore, the higher the audit quality, the better the company's earnings quality (Wijaya 2020). The results of this study are in line with the theory in the framework of thought and research conducted by Hartoko (2021) and Wijaya (2020) which states that audit quality affects earnings quality. This study shows that more companies use Public Accounting Firms that are affiliated with The Big Four Public Accounting Firms that have a good reputation and experience so they can detect financial reporting irregularities more proficiently. The regression coefficient (β) for the audit quality variable is negative on discretionary accruals, meaning that the higher the quality of the audit, the smaller the discretionary accruals. Small discretionary accruals indicate high earnings quality

6. Conclusion

This study aims to analyze the effect of the variables that affect earnings quality, namely the presence of female directors, age diversity of the board of directors, educational background of members of the board of directors, proportion of independent commissioners and audit quality in non-financial State-Owned Enterprises listed on the Stock Exchange. Indonesian Securities 2016-2020. The sample in this study was 16 companies with a research period of 5 years and a total of 78 samples of data processed due to the presence of 2 samples which were outlier data so that they were removed during the data processing. This study uses Microsoft Excel 2019 and Eviews 12 in processing the data. Based on the results of research conducted by researchers, the following conclusions are obtained.

Based on the results of panel data regression testing, it is known that simultaneously the independent variables, namely the presence of female directors, age diversity of the board of directors, educational background of the board of directors, the proportion of independent commissioners and audit quality have an influence on the dependent variable, namely earnings quality. Based on the coefficient of determination obtained by 0.137102, it means that the variables of the presence of female directors, age diversity of the board of directors, educational background of the board of directors, the proportion of independent commissioners and audit quality have the ability to explain earnings quality by 13.7% and the remaining 86.3% is explained by other variables outside of this study.
Partial testing to find out each independent variable on the dependent variable, namely earnings quality, is as follows.

a) The presence of female directors does not affect the quality of earnings in non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period.
b) The age diversity of the board of directors has no effect on the earnings quality of non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period.
c) The educational background of the directors affects the earnings quality of non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period.
d) The proportion of independent commissioners has no effect on earnings quality in non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period.

e) Audit quality affects earnings quality in non-financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2016-2020 period.

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