

# The effect of Good Corporate Governance and Audit Quality on the Quality of Earning

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**Abstract.** The study examined the effect of corporate governance and audit quality on the quality of earnings. Corporate governance with board diversity is measured from the aspect of age and educational background members of the board of directors. Audit quality is measured based public accounting firm that audited by a big four firm/non-big four. The study measures the quality of earnings with discretionary accruals. This study used a sample of 160 non-financial companies listed on the Stock Exchange in 2010-2013, bringing the total observation in this study was 640 samples. The results provide empirical evidence that the age member of the board of directors does not affect the quality of earnings, a background study also does not affect the quality of earnings. Quality audits also show the results do not affect the quality of earnings.

Keywords: gcg, board diversity, audit quality, earnings quality, discretionary accruals

## Introduction

In simply good corporate governance also meaning as the system arrange and control company to make value added for all stakeholder (Sulistiyanto & Wibisono, 2003). Indonesia has implemented principal of good corporate governance since economic crisis in 1997-1998. According to some practitioners of economic experts, the crisis in Indonesia occurred because there is no and weak implementation of good corporate governance in Indonesia.

Implementation good corporate governance as the prevent of business ethiquet and working ethiquet as the commitment of the company and it's related to increase good will of company and value added (Sutedi, 2011). According to Dechow et al, (2009) good corporate governance is an oversight mechanism that can be applied by the company in controlling opportunistic management that can cause a decrease in the quality of financial statements in which the financial statements are as accounting products, which is one suggestion for the principal (owner of the resource) to monitor the activities carried out by the agent (management). The financial statements also become the main tool for companies to submit

financial information regarding the accountability of management. The financial statements are expected to meet the needs of those external and internal parties who lack the authority to obtain the information they need from the company's direct source (Boediono, 2005).

Looking into financial report by internal and external company expect giving a good quality of financial report. By fulfill this demand it needs to prepare good audit quality on the result of financial report. As explained De Angelo in the quotation (Mulyadi, 2002) that audit quality is the probability that an auditor discovered and reported about the existence of a breach in the accounting system audit. The auditors are to given the confirmation integrity of the report and become maximizing result and quality audited. One of the important component in financial report of the company distract external is the earnings. The increasment and decreasment of earning effect on decision made by the management. The quality of earning is the correct earnings and accuracy shown company operational profitable. Upgrading increasment of earnings if it's reached to plan even over the target (Sutopo, 2009).

The problems in this empirical study is whether the board members age affects the quality of earnings,

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whether background study board members affect the quality of earnings, and whether the quality of audit companies affect the quality of earnings. The purpose of this study was to investigate the influence of board diversity of age and educational background board members on the quality of earnings, as well as the quality of corporate audit of the quality of earnings.

## Literature Review

Theoretical used as the guidance to analysis and argument on the study. It needs on the study as the agency theory, and efficient market hypothesis. Agency theory used by Jensen & Mecking (1976) said that the cost of agency affect from unbalance and separated ownership between stakeholder and management company. Agency conflict need supervise to ensure manage by management follows the regulation. Efficient market hypothesis explained by Fama (1970) said that market will be more efficient if price make by market as shown in financial report.

Kusumastuti et al. (2007) said that the increasment of committee members will make problem solving than the members of variety homogen committee board diversity will increase creativity and innovation in ciompany in other way heterogenetical in committee solution in problems needs more and by smart evaluating consistensy faces from the alternative taken (Kusumastuti et al., 2007). This study reinforced by research conducted by a senior official (2010), Carter et al. (2010).

Kusumastuti et al. (2007) examined the relationship between age with the company's board of directors, with the assumption that the increasing age of the person will be more mature and can produce a much wiser decision. The study used age the proportion of board members over the age of 40 years. However, the results stated differently, that age does not affect the value of the company, the older the person, the more health problems encountered and causes reduced intellectual ability. The results of different studies was stated by a senior official (2010) which states that the age member of the board of directors have a significant impact on the financial performance of the company. The big difference in the results, the effect of age on the value of the company, and there is no empirical evidence stating the effect of age on the quality of earnings, encourage researchers to conduct research on the relationship, so that the resulting hypothesis is as follows.

H1: Age member of the board of directors' positive effect on earnings quality.

Kusumastuti et al. (2007) said that nothing effect from a background study on management education, bussiness and economic of the board directors towards increasing value company in stake holders, to ensure research on testing relation between background study of directors towards one factory on stakeholders is ovality of earnings.

H2: Background study members of the board of directors affect the quality of earnings.

The purpose of financial audit is to provide assurance regarding the integrity of the financial statements presented by management. Certainty regarding the relevance and reliability of the financial statements of the company is needed to help external parties in making a business decision (Barry, 2003). It is important for users of financial statements to look at Public Accounting Firm (KAP) as independent and competent parties as it will influence whether or not the valuable services rendered by the firm to the user. If users feel KAP provides useful and valuable services, then the value of the audit or audit quality also improved, so that the firm is also required to act with professionalism. Research on the quality of the audit of the quality of earnings has also been done by Francis et al, (1999), analyzing the effect of auditor reputation, long associated with the auditor and the client important. The results indicate that the auditor's reputation negatively related to earnings quality. This study uses the size of the public accounting firm under the auspices of the big 4 and non-big 4 as a proxy of the quality of the audit firm.

H3: The quality audit positive effect on earnings quality.

## Results and Discussion

The independent variable in this study is a board diversity as measured by age (AGE) and background study (BSTUDY) board of directors, and audit quality (KAP). The dependent variable consists of earnings quality as measured by discretionary accruals (DA). This study has several variables that control the level of leverage (LEV) company, sales growth (SGROWTH), and firm size (FSIZE). H1 regression models that age influences the board of directors of the quality of earnings as measured by discretionary accruals (DA) is:

$$DA = \beta + \beta_1.AGE + \beta_2.LEV + \beta_3.SGROWTH + \beta_4.FSIZE + \epsilon$$

H2 regression models that influence background study on the quality of earnings (discretionary accruals) are:

$$DA = \beta + \beta_1.BSTUDY + \beta_2.LEV + \beta_3.SGROWTH + \beta_4.FSIZE + \epsilon$$

H3 regression models that influence the quality of audits of the quality of earnings is:

$$DA = \beta + \beta_1.KAP + \beta_2.LEV + \beta_3.SGROWTH + \beta_4.FSIZE + \epsilon$$

Operational definitions of the dependent variable is the quality of earnings as measured by discretionary accruals, calculated with the following steps (Dechow et al, 1995):

$$TA_{it} = \frac{EAT_{it} - CFO_{it}}{A_{it-1}}$$

*TA<sub>it</sub>: Total accrual firm i in year t divided by total assets of the company i in year t-1*

Calculating the value of accruals with OLS regression equation:

$$TA_{it} = \alpha_1 (1 / A_{it-1}) + \alpha_2 [\Delta REV]_{it} + \alpha_3 [PPE]_{it} + \epsilon_{it}$$

*TA<sub>it</sub>: Total accrual firm i in year t divided by total assets of the company i in year t-1*

$\Delta REV_{it}$ : Sales of the company i in year t minus sales of the company i in year t-1 divided by total assets of the company i in year t-1

$A_{it-1}$ : Total assets of company i in year t-1.  
 $PPE_{it}$ : Property, plant, dan equipment firm i in year t divided by total assets of the company i in year t-1

Calculating non-discretionary accruals:

$$NDA_{it} = \alpha_1 (1 / A_{it-1}) + \alpha_2 [\Delta REC]_{it} + \alpha_3 [PPE]_{it} + \epsilon_{it}$$

*NDA<sub>it</sub>: Non-discretionary accruals*  
 $\Delta REC_{it}$ : net receivables firm i in year t minus net receivables firm i in year t-1, divided by total assets of the company i in year t-1

Calculate discretionary accruals:

$$DA_{it} = (TA)_{it} - (NDA)_{it}$$

*DA<sub>it</sub>: Discretionary accruals firm i in year t*

The independent variables in this study were age, namely the proportion of board members aged 40 to 50 years for each year of observation, background study is the proportion of board members who have a background in management education, business, economics, and the variable quality of the audit as measured by a dummy variable which gives a value of

1 for companies audited by the big four accounting firm and the value 0 for companies audited by KAP non-big four.

The control variables used in this study is the leverage (LEV), sales growth (SGROWTH), and firm size (FSIZE). Leverage is calculated by total debt firm i in year t divided by total assets of the company i in year t. Sales growth is calculated using the formula: (sales this year - previous year's sales) divided by the previous year's sales. Firm size (FSIZE) measured by the natural logarithm of total assets of the company.

Mechanical determination of the number of samples in this research is purposive sampling using judgment sampling method. Companies sampled must meet the following criteria: (1) nonfinancial companies listed on the Indonesia Stock Exchange and actively reporting annual reports (annual report) and financial statement (financial statement) for the period ended December 31, during the period 2010 to 2013, (2) not conduct corporate action in 2010 to 2013, (3) the annual report and financial statements are presented in local currency (rupiah), and (4) provide profile information directors in the annual report which contains information on age (age) and educational background (background study). Based on the criteria on the number of such samples, obtained a total of 160 companies per year with a 4-year observation period, bringing the total sample in this study was 640 samples.

Table 1 Number of Samples Companies

Criteria	Number
Companies listed in the Indonesia Stock Exchange	507
Companies engaged in financial industry	(88)
Perform corporate action in 2010-2013	(105)
The annual report and the Company's financial statement is not complete	(86)
Companies whose financial statements does not end on December 31	(6)
Companies that use currencies other than Rupiah	(47)
Companies that do not disclose your profile information directors in the annual report	(15)
Total company used as samples per year	160
Total observational study in 2010-2013	640

This study consists of several tests, including: descriptive statistics test, classic assumption test, test the coefficient of determination, and a t-statistic test. Based on the descriptive statistics, obtained by the average value of the variable age was 0.44 with an average number of board members is 5 people. This means that the average non-financial companies into the sample only have two directors who are aged 40 to 50 years. There are some companies that do not have board members aged 40-50 years, as can be seen from a minimum value of 0.00, but some companies have

all members of the board of directors aged 40-50 years as the maximum value of this variable is 1.00 or 100%.

Table 2 Descriptive Statistics

	N	Min	Max	Mean	Std. Dev.
AGE	640	0,00	1,00	0,44	0,26
BSTUDY	640	0,00	1,00	0,58	0,22
KAP	640	0,00	1,00	0,36	0,48
LEV	640	0,01	2,61	0,47	0,27
SGROWTH	640	-1,00	5,03	0,20	0,47
FSIZE	640	22,94	32,99	28,13	1,73
DA	640	-1,89	1,93	0,04	0,19
TTL					
BOARD	640	2	11	5	1,88
Valid N	640				

This table is the result of descriptive statistical tests. Dependent variables include discretionary accruals (DA), the independent variable is AGE, BSTUDY, LEV, SGROWTH, and FSIZE. DA is a proxy for earnings quality is calculated by the formula modifications Jones (modified Jones), AGE = proportion of the age of the board of directors from 40 to 50 years, BSTUDY = proportion of background study management, business, economics member of the board of directors, KAP = quality audit companies measured by dummy variable, the value of 1 for the companies audited by the big four and the value 0 if audited by non-big 4, LEV = Total Debt / Total Assets, SGROWTH = (sales this year - previous year's sales) / sales of the previous year, FSIZE = the natural logarithm total assets.

The mean value = 0.58 for variable BSTUDY as shown in Table 2 states that more than 50% of board members of companies have an educational background in management science, business, and economics. BSTUDY minimum value is 0.00 indicating that some companies also do not have a board of directors whose background management, business, and economics, but most companies have all members of the board who has the educational background of management, business, and economics that can be seen from the BSTUDY maximum is 1.00.

The average value of the variable KAP was 0.36, the minimum value of the variable is 0.00 and the maximum value is 1.00. The average value of the claim that companies audited by the big four accounting firm, only 36%, while 64% of other companies audited by KAP non-big four.

LEV control variable has an average value of 0.47, the minimum value of 0.01, and a maximum value of 2.61. The average value of leverage that nearly 50% can be considered shareholders of the company in making decisions related to risk decision, because the level of risk the company cannot recover the assets of shareholders in the future is 47%. Variable SGROWTH has an average value of 0.20, the minimum value of -1.00, and a maximum value of 5.03. This indicates that the growth of sales of sample companies have not been entirely uniform. The higher the number of sales growth, the company experienced good sales growth. Variable FSIZE has an average value of 28.13, the minimum value of the variable is 22.94, and the maximum value of the variable is 32.99.

The total amount of assets has increased and increases show that increasing and so does the size of the studied company.

The dependent variable discretionary accruals (DA) are a proxy for the quality of earnings with an average value of 0.04. A minimum value of the variable is -1.89, and the maximum value is 1.93. Far range between minimum and maximum values shows that earnings management practices undertaken by companies varies greatly. DA high value indicates that the practice of earnings management performed by the company's management is also high, so the quality of the company's profit decline.

After doing descriptive statistical tests, we then do research on the classical assumption test. This research is panel data, which according Nachrowi & Usman (2006) in Sustainable et.al. (2014), classic assumption test for panel data only multicollinearity test and heteroscedasticities problem, because the data panel is a combination of cross section data and time series data so it does not require free equations of normality and autocorrelation. Multicollinearity test to determine whether there is a perfect correlation between independent variables in a multiple regression model equation can be seen from the variance inflation factor (VIF). A good regression equation is trouble-free multikolinearitas, seen from VIF value  $\leq 10$ . Based on the results in Table 3.3 to Table 3.5 below for all the VIF values obtained regression equation  $\leq 10$ , so that the regression equation in this study are free from multicollinearity problems. Other classical assumption test is test heteroskedastisitas tested. A good regression equation is trouble-free heteroskedastisitas by looking Prob.Chi-square values  $> 0.05$ . Based on the test results of white on the fifth research model, the H1 has a value Prob.Chi-square = 0.8638, H2 has a value Prob.Chi-square = 0.8227, H3 has a value Prob.Chi-square = 0.2031, so it can be concluded that all the regression model is free from the problem of heteroscedasticity.

Table 3 Effect of Age on the Quality of Earnings

	Sign	Coeff.	p-value	VIF
AGE	±	0,0285	0,5121	1,016
LEV	±	-0,2362	***0,0009	1,012
SGROWTH	±	0,0311	*0,0568	1,016
FSIZE	±	0,2028	***0,0000	1,020
(constant)	≠	-5,5700	***0,0000	
R-squared			0,4751	
Adjusted R-squared			0,2954	
F-test Sign (F-statistic)			***0,0000	
N			640	
Hausman Test			Fixed Effect	

\*\*\* Significance level 1%. \*\* Significance level 5%. \* Significance level 10%

The value of Adjusted R-squared is 0.2954. Adjusted R-squared value that is greater than 0.05 states that the independent variables and control variables AGE LEV, SGROWTH, and FSIZE can explain variations in the variable DA 29.54%, and the remaining 70.46% is explained by other factors which is not included in the research equation. Hypothesis test results H1 t-statistic can be seen from the p-value. The independent variable AGE partially no effect on discretionary accruals. These results suggest that age board of directors does not affect the quality of earnings, and although the directors of the company are at an age that is proportionate cannot prevent the company from earnings management practices resulting in decreased earnings quality. The control variables that affect the quality of earnings is leverage and firm size at 1% significance level, while the other control GROWTH variables that affect the level of significance of 10% against earnings quality.

Background influence research study (BSTUDY) board of directors to do with the quality of earnings and generating test Housman test model as a fixed effect panel data estimation methods are appropriate. The study of these effects result in that background study does not affect the quality of earnings as measured by discretionary accruals. P-value variable BSTUDY is 0.2552 which means that the variable is not significant at the significance level of 1%, 5%, or 10%. These results illustrate that even if a company has a board of directors with the appropriate educational background to the management positions that management education, business, and economy, cannot guarantee implemented by the agency conflict management does not occur that result in decreased quality of earnings.

Table 4 Effect of Background Study Board on Quality of Earnings

	Sign	Coeff.	p-value	VIF
BSTUDY	±	0,0562	0,2552	1,004
LEV	±	-0,2344	***0,0010	1,012
SGROWTH	±	0,0314	*0,0543	1,014
FSIZE	±	0,2016	***0,0000	1,008
(constant)	≠	-5,5567	***0,0000	
R-squared			0,4761	
Adjusted R-squared			0,2967	
F-test Sign (F-statistic)			***0,0000	
N			640	
Test results Hausman Test			Fixed Effect	

\*\*\* Significance level 1%. \*\* Significance level 5%. \* Significance level 10%

The control variables that affect the quality of earnings is LEV and FSIZE at 1% significance level. Other control variables that affect the quality SGROWTH profit by 10% level.

Table 5 Effect of Audit Quality on the Quality of Earnings

	Sign	Coeff.	p-value	VIF
KAP	±	0,0267	0,6625	1,335
LEV	±	-0,2296	***0,0013	1,012
SGROWTH	±	0,0318	*0,0514	1,016
FSIZE	±	0,1988	***0,0000	1,342
(constant)	≠	-5,4559	***0,0000	
R-squared			0,4749	
Adjusted R-squared			0,2951	
F-test Sign (F-statistic)			***0,0000	
N			640	
Test results Hausman Test			Fixed Effect	

\*\*\* Significance level 1%. \*\* Significance level 5%. \* Significance level 10%

KAP a variable with p-value 0.6625 does not affect the quality of earnings as measured by discretionary accruals. This means that the non-financial companies are being sampled and their financial statements audited by a public accountant's office under the auspices of the big 4 does not affect the level of earnings management practices conducted by the management company, which can make the company's financial statements be not qualified. The results are consistent with research conducted by Anita et al. (2015) which states that audit quality is proxies by non-big four KAP and KAP big 4 cannot reduce or prevent the occurrence of earnings management practices (classification shifting). The influence of the control variables LEV and FSIZE partially influence on the quality of earnings with a significance level of 1%, while the control variables SGROWTH effect with a significance level of 10% on earnings quality.

## Conclusion

This study aims to determine the effect of GCG as measured by a proxy board diversity age and background study on the quality of earnings, as well as the influence of the quality of financial audit carried out by the big four KAP and non-big four KAP. Total sample was 160 company with years of observations from 2010 to 2013, bringing the total study observation was 640. The results showed that age board of directors does not affect the quality of earnings, the results of background research studies show that the background study does not affect the quality of earnings. Other research results on the effect of audit quality on the quality of earnings show the results of that audit quality does not affect the quality of earnings.

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