

ROLE OF AUDIT COMMITTEE ON EARNINGS INFORMATIVENESS

(Study of Non-Financial Companies Listed on the IDX in 2011-2015)

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Abstract

This study aims to provide empirical evidence about the role of audit committees on earnings informativeness. Earnings informativeness is the effect of earnings information on changes in stock prices (stock returns). The audit committee is treated as a moderating variable to find out its role whether it can strengthen the influence of earnings information on stock returns. The proxies of audit committees are female audit committee member and audit committee meeting activities.

This study uses purposive sampling method and get a sample of 317 firm-year observations of companies listed on the Indonesian Stock Exchange (IDX) in non-financial sector for the period 2011 – 2015. By using moderating regression analysis (MRA) the results show that the proportion of the female audit committee members and the activities of the audit committee increase the influence of earnings information on stock returns.

Audit committees as part of corporate governance play a role in increasing earnings informativeness. In Indonesia the existence of an audit committee can be a signal of the quality of earnings.

Key words: female audit committee member, audit committee activities, cummulative abnormal return, unexpected earnings.

1. Introduction

The purpose of this study is to examine the role of the audit committee in increasing earnings informativeness. Earnings informativeness is the effect of earnings information on changes in stock prices. Shareholders are very interested in earnings information related to making investment decisions. However, managers as parties who have information about the condition and prospects of the company have the opportunity to exploit information at the expense of others in order to obtain personal benefits (Scott, 2015). Therefore, to overcome this information asymmetry, a company needs a reviewer of financial information (that will be published to the public). In this regard, the audit committee, as a committee that assists the

functions of the board of commissioners, can be a reviewer of the company's financial information.

Based on the Decree of the Head of BapepamLK No: Kep-643 / BL / 2012, the audit committee has the duties and responsibilities, among others, to review financial information that will be issued by the issuer to the public and/or the authorities including financial reports, projections and other reports that are related to the issuer's financial information. This shows that the audit committee has a role as reviewer of financial information to be issued by the company. As stated by Woidtke and Yeh (2013) that a firm's audit committee primarily oversees the financial reporting process of a firm. Audit committees meet regularly with the outside auditors and internal financial managers of the firm to review the financial statements, audit process, and internal accounting controls of the firm. Thus, audit committees serve an important oversight role and can affect the quality of reported earnings.

Published earnings can give a varied responses, this indicates a market reaction to earnings information (Cho and Jung, 1991). The responses given depends on the quality of earnings generated by the company. The strong market reaction to earnings information, which is reflected in the high and significant earning response coefficient (ERC), shows high quality reported earnings. Related to this, Brown and Caylor (2006) suggest that corporate governance (CG) is a factor that is expected to improve the quality of information. Various observations on the quality of information have been carried out by previous researchers, among others, by Boubaker and Sami (2011), Niu (2006), Wang (2006). The researchers added moderating variables, with the aim of testing their influence in the relationship of dependent and independent variables. The authors will add the role of the audit committee, as a variable that moderates the influence of earnings information to changes in stock prices.

Consideration of the use of the audit committee as a moderating variable in this study, as mentioned above, that the audit committee has a role in assisting the Board of Commissioners in reviewing the company's financial information, which will be published. The role of the Audit Committee in assisting the Board of Commissioners is a form of implementation of CG. CG implementation is expected to be able to improve earnings informativeness (Dasgupta, Gan and Gao, 2009; Sarikhani and Ebrahimi, 2011; and Lew and Wu, 2013). This is based on several opinions (Abbot and Parker, 2000; Choutrou, Bedard and Courteau, 2001; and Xie, Davidson, Dadalt Davidson-Iii and Dadalt, 2003) which suggest that the application of CG is related to reduced fraud in financial reporting (financial reporting). Based on this, the application of corporate governance, particularly the role of the Audit Committee is expected to improve the quality of information produced by company management (Brown and Caylor, 2006; and Firth, Peter and Rui, 2007).

Various studies related to the relationship of the Audit Committee to the level of returns have been carried out. Huang Yan, Fornaro and Elshahat (2011) in their study found that female audit committee members had a significant positive effect on cumulative abnormal return (CAR) compared to the appointment of male Audit Committee members. The study of Luo, Xiang, and Huang (2017) shows that gender diversity can function as a mechanism to replace corporate governance in overcoming manipulation, so that stakeholders have confidence that earnings reports are of good quality. The same thing was stated by Thiruvadi and Huang (2011) who

found consistent evidence to show that the presence of a female director on the audit committee constrains earnings management by increasing negative (income-decreasing) discretionary accruals.

The inconsistency of the results of the research and consideration of the importance of the role of the audit committee were the basis of the researchers in determining the moderating variables in this study. The proxies of the audit committee are the proportion of female audit committee members and the audit committee meeting activities. This is important because in Indonesia female audit committee members have not been regulated and meeting activities becomes a matter that can be used as a benchmark in assessing the performance of the audit committee.

Thus, through this research it is expected to find answers to the question of whether the characteristics of the audit committee are able to improve earnings informativeness, so that an overview of the importance of the role of the audit committee as an investment consideration is obtained.

2. Literature Review

2.1. Earnings Informativeness

Earnings Informativeness is the effect of earnings information on stock returns. This implies that changes in stock returns in the company are a reflection of the condition of the company (Ettredge, Kwon, Smith, and Zarowin, 2005; Lundholm and Myers, 2002). The relationship between earnings and stock returns can be described as a causal relationship. Earnings information is a cause that causes a reaction in the stock price (stock return). The high reaction of investors and creditors to earnings information, shows the high level of interest in this information. Lev (1989) refers to SFAC No.1, arguing that earnings can be used to assess a company's prospects for example: (a) evaluating management performance, (b) estimating earnings power, (c) predicting future earnings or (d) assessing investment risk or a loan from the company. This condition shows the level of importance of the earnings information is quite high, so the announcement of earnings information will usually be followed by market reactions (changes in stock prices). Observations on the existence of a positive relationship between earnings and returns, were initiated by research by Ball and Brown (1968).

Changes in stock prices that go up and down on go public companies are a common phenomenon that is often seen on the stock exchange. Information available on the capital market can affect trade transactions on the market. Investors or interested parties will evaluate any information available, so that it can cause changes in stock trading transactions. For example: earnings information (Beaver 1968), projection of earnings per share, risk level from profit projections, proportion of corporate debt to equity, and dividend distribution policies, economic activities, taxes (Weston and Brigham, 1996) changes in stock prices, changes trading volume, changes in the proportion of ownership, etc. (Hartono, 2008). This indicates that investors will react to any information that occurs in the capital market. This investor reaction will be seen from the ups and downs of stock prices, which will generate stock returns.

2.2. Audit Committee

According to the Forum for Corporate Governance in Indonesia (FCGI) (2001), CG is a system that is owned and applied to direct and control all parties related to the organization in order to achieve its objectives. Companies in Indonesia apply a two-board system or a two-tier board system like most companies in mainland Europe (Continental European) (FCGI, 2001). According to the system, the general meeting of shareholders (GMS) is the highest structure that appoints and dismisses the Board of Commissioners and directors. The existence of the Board of Commissioners is an institution that represents shareholders to carry out control functions over management.

The existence of the Board of Commissioners and the Audit Committee are important indicators for good CG implementation. The Board of Commissioners carries out the oversight and advisory function for the company's directors, so that it is expected to improve the company's financial performance. In carrying out its duties, the Board of Commissioners is assisted by various committees including the Audit Committee. The role of the Audit Committee in this connection is as a tool to improve the quality of openness including financial performance, so that internal controls become more efficient and company performance increases (Filipovic and Filipovic, 2008).

The Audit Committee has the task of assisting the Board of Commissioners in overseeing the company's financial management. The Audit Committee has an important and strategic role in maintaining the credibility of the financial report preparation process as well as maintaining an adequate system of corporate supervision, implementing CG and increasing company performance (FCGI, 2001). The Audit Committee is a monitor that can contribute to a good CG framework (Islam, Islam, Bhattacharjee, and Islam., 2010). The establishment of the Audit Committee serves as a tool to improve the quality of transparency in CG including financial performance, so that internal controls in the company become more effective (Filipovic and Filipovic, 2008).

2.3. Audit Committee and Earnings Informativeness

Audit Committee is a committee formed by and responsible to the Board of Commissioners in helping carry out the duties and functions of the Board of Commissioners in accordance with the Decree of the Chairperson of BapepamLK No: Kep-643 / BL / 2012 concerning the Establishment and Work Guidelines of the Audit Committee. According to the Decree, the task of the audit committee is to review financial information that will be issued by the Issuer or Public Company to the public and / or the authorities including financial reports, projections and other reports related to financial information of the Issuer or Public Company. Based on the duties of the audit committee, the audit committee has the potential to improve the quality of financial information (earnings quality) reported by the company.

According to Dechow, Ge and Schrand (2010), one of the quality of earnings is earnings informativeness. The existence of an audit committee, as part of CG implementation, is expected to increase profit informativeness. Several studies have been conducted related to the effect of CG on earnings informativeness (Dasgupta, Gan and Gao, 2009; Sarikhani and Ebrahimi, 2011; and Lew and Wu, 2013).

3. Methods

3.1. Regression Models

To test whether the members of the female audit committee and audit committee activities strengthen the effect of unexpected earnings (UE) on CAR, the moderating regression analysis (MRA) mode is used with the following equation.

$$CAR = \alpha_0 + \alpha_1 UE_{it} + \alpha_3 DER + \varepsilon_i \quad (1)$$

$$CAR = \beta_0 + \beta_1 UE_{it} + \beta_2 Prop_Female + \beta_3 Activity_AC + \beta_4 DER + \varepsilon_i \quad (2)$$

$$CAR = \gamma_0 + \gamma_1 UE_{it} + \gamma_2 Prop_Female + \gamma_3 UE_{it} * Prop_Female + \gamma_4 Activity_AC + \gamma_5 UE_{it} * Activity_AC + \gamma_6 DER + \varepsilon_i \quad (3)$$

In the equation:

CAR	=	Cummulative Abnormal Return
UE _{it}	=	Unexpected Earnings
Prop_Female	=	Proportion of Female Audit Committee Members
Activity_AC	=	The number of formal meetings of the Audit Committee per year
DER	=	Debt to equity ratio

The analysis in this study was carried out by the MRA model with the Sharma, Durand and Gur-Arie (1981) approaches. Sharma et. al. (1981) divided the types of moderator variables into three groups, namely Homologizer, Quasi Moderator and Pure Moderator. Homologizer is a type of moderating variable that influences the strength of a relationship, but does not interact with the independent variable and is not significantly related to both independent and dependent variables. In quasi moderators, this type of moderating variable functions as an independent variable and also interacts with other independent variables. Pure moderator shows moderating variables that are not related to the independent and the dependent variable, but interact with the independent variable. Table 1 below shows an overview of the grouping of types of moderating variables.

Tabel 1
Typology of Specification Variables

	Related to Criterion and/or Predictor	Not Related to Criterion and Predictor
No Interaction with Predictor	I Intervening, Exogeneous, Antecedent, Supressor, Predictor	II Moderator: Homologizer
Interaction with Predictor Variabel	III Moderator: “Quasi” Moderator	IV Moderator: “Pure” Moderator

Sumber: Sharma, *et. al.* (1981: 292)

In Table 1, it appears that Sharma et. al. (1981) positioned the three types of moderation variables as mentioned above, each in quadrants II, III and IV. In quadrant I is a type of variable that is related to independent and dependent variables, but does not interact with independent variables. This variable type includes intervening variables, exogenous, antecedent and predictor.

3.2. Variables

The dependent variable in this study is CAR, with the following equation:

$$CAR = \alpha_0 + \alpha_1UE + \varepsilon_i \tag{4}$$

In the equation:

CAR = cumulative abnormal return is a cumulative return on a company's stock securities (i) during the window period 5 days before and 5 days after the date of the announcement of earnings.

UE = unexpected earnings are the difference between actual earnings and expected earnings.

α_1 = earnings response coefficients (ERC)

The earnings response coefficient explains the relationship between earnings and stock returns. The informativeness of earnings can be measured by the earnings response coefficient (ERC), which is the correlation between stock returns and reported earnings (Woidtke and Yeh, 2013 and Wang, 2006).

Cumulative abnormal return (CAR) is obtained by summing the company's abnormal return (i) throughout the window period. The short use of the window period is chosen because investors will react quickly to information that has economic value. Cumulative abnormal returns during the window period are calculated as follows:

$$CAR_i = \sum_{t=-n}^{+n} AR_{it} \tag{5}$$

An abnormal return shows the market response to an event. An abnormal return is an excess of return that actually occurs against a normal return (Hartono, 2008). Normal return is the investor's expected return. An abnormal return occurs because of new information that can

change investor return expectations. An abnormal return is calculated by reducing the actual return with the expected return as follows:

$$AR_{i,t} = R_{i,t} - E [R_{i,t}] \tag{6}$$

In the equation:

- $AR_{i,t}$ = abnormal return on securities i in the period of the t-event
- $R_{i,t}$ = actual return on securities i in the period of the t-event
- $E[R_{i,t}]$ = expected return on securities i in the period of the t-event

The expected return is estimated by the market model. The expectation model is formed by using regression techniques through the following equation:

$$R_{i,t} = \alpha_i + \beta_i \cdot RM_t + \varepsilon_{i,t} \tag{7}$$

In the equation:

- $R_{i,t}$ = return of securities (i) in the estimation period - t
- α_i = intercept of securities i
- β_i = beta of securities i
- RM_t = Market Return of securities i

Based on equation (4), the independent variable of this study is unexpected earnings (UE). The EU or surprise earnings is the difference between actual earnings and expected earnings. Expected earnings is estimated by a random walk model. The random walk model estimates the earnings for the current period to be the same as the previous period earnings.

$$UE_{it} = \frac{E_{it} - E_{i,t-1}}{|E_{i,t-1}|} \tag{8}$$

In the equation:

- UE_{it} = unexpected earnings of company i in period t
- E_{it} = accounting earnings of company i in period t
- E_{it-1} = accounting earnings of company i in period t-1

The moderating variable in this study is the characteristics of the audit committee, which includes presence of female members (gender) and meeting activities. The female audit committee member is measured by the proportion of female audit committee members in the company, namely the number of female audit committee members divided by the total number of audit committee members in the company. Audit committee activities are measured by the number of formal meetings of audit committees held annually.

3.3. Data and Sample

Data on the dependent, independent, moderating and control variables were obtained from the Indonesian Capital Market Directory (ICMD), www.idx.co.id and from the sites of each

company for the reporting year 2011 to 2015. From that time period a population target of 2,233 firm years was obtained. By using a purposive sampling method obtained 317 company annual reports.

4. Results and Discussion

4.1. Descriptive Statistics

Table 2 below shows descriptive statistics. The average value of CAR from the research object shows the number -0.0082; this shows that most of the expected returns are greater than actual return. The coefficient of variation is -1,037.,80% (0.0851/-0.0082).. This shows the level of CAR variability is quite high.

Differences in the minimum and maximum values of UEit show a considerable difference, amounting to -608.3333 and 64.8024 respectively. This situation signifies a fairly high level of variation, namely the value of the coefficient of variation is 1,673.74%. For the audit committee activities, the variation coefficient is also quite large, which is 105.90% respectively.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	317	-0.49	0.24	-0.0082	0.0851
UEit	317	-608.33	64.80	-2.0767	34.7618
Prop_Female	317	0.00	1.00	0.1423	0.2286
UEit*Prop_Female	317	-23.40	43.20	0.0615	2.8001
Activity_AC	317	1.00	61.00	8.8770	9.4004
UEit* Activity_AC	317	-608.33	387.47	-1.5406	57.3511
DER	317	-4.76	18.19	1.0062	1.3963
Valid N (listwise)	317				

4.2. Correlations

The results of the correlation analysis are presented in Table 3 below. In Table 3 it shows that CAR correlates with UEit. This shows that unexpected earnings has value relevance. CAR also correlates with interaction variables of UEit*ActivityKA and does not correlate with audit committee activities. Based on the Sharma *et. al.* (1981) model, this indicates that audit committee activity are pure moderator variables.

Table 3 Correlations

	CAR	UEit	Prop_Female	UEit*Prop_Female	Activity_AC	UEit^Activity_AC	DER
CAR	1						
UEit	0.318**	1					
Prop_Female	0.067	0.045	1				

UEit*Prop_Female	0.101	0.150**	0.079	1			
Activity_AC	-0.002	0.052	-0.180**	0.000	1		
UEit*Activity_AC	0.165**	0.714**	0.058	0.536**	0.093	1	
DER	-0.004	0.044	-0.080	0.003	-0.041	0.041	1

** . Correlation is significant at the 0.01 level (2-tailed).

4.3. Regression Results

Table 4 presents the regression results of Equation (1) with CAR as the dependent variable. The results of regression Equation (1) indicate that the value of F is significant at the level of 0.000. This F test is very significant, this means that the model explains variations in the CAR variable. R squared and adjusted R squared is 31.8% and 10.1% respectively. This means that the regression equation explains more than 10.0% variation of CAR. The coefficient of UE is positive 0.001 and significant. This result shows that the UE has value relevance for CAR.

Table 4. Results of Regression Equations (1)

Variabel	Expected sign	Coef.	Sig.
(Constant)		-0,006	0,327
UEit	+	0,001	0,000
DER		-0,001	0,740
N		317	
F		17,701	0,000
R Square		0,318	
Adjusted R Square		0,101	

Table 5 presents the regression results of Equation (2) with CAR as the dependent variable. The results of regression Equation (2) show that the value of F is significant at the level of 0,000. This F test is very significant, this means that the model explains variations in the CAR variable. R squared and adjusted R squared are 32.3% and 10.4% respectively. This means that the regression equation explains more than 10.0% of the CAR variation. The coefficient of UEit is positive 0.001 and significant. This shows that the EU has value relevance for CAR.

The regression results show that the regression regression coefficient of the audit committee characteristics, female audit committee member and audit committee activities, are not significant. Based on the Sharma *et. al.* (1981) model this means that these two variables are

not intervening, exogeneous, antecedent, suppressor, or predictor variables. Based on the regression results, it is possible that these three variables are moderating variables.

Tabel 5. Results of Regression Equation (2)

Variabel	Expected sign	Coef.	Sig.
(Constant)		-0.008	0.364
UEit	+	0.001	0.000
Prop_ Female	+	0.018	0.370
Aktivitas KA	+	-9.617E-5	0.846
DER	-	-0.001	0.846
N		317	
F		9.057	0.000
R Square		0.323	
Adjusted R Square		0.104	

Table 6 presents the regression results of Equation (3) with CAR as the dependent variable. The results of regression Equation (3) indicate that the value of F is significant at the level of 0,000. This F test is very significant, this means that the model explains variations in the CAR variable. R squared and adjusted R squared are 36.1% and 13.1%, respectively. This means that the regression equation explains more than 13% of the CAR variation. The coefficient of UE is positive 0.001 and significant. This shows that UE has value relevance for CAR.

The regression results indicate that the regression coefficient of the female audit committee members (prop_female) and audit committee activities are not significant. UEit*Prop_Female and UEit*Aktivitas_AC interaction variable regression coefficient is positive and significant. Based on the regression results, it means that the female audit committee member variables and audit committee activities are moderating variables. Both of these variables according to the Sharma *et. al.* (1981) model are a pure moderator variable.

Tabel 6. Results of Regression Equation (3)

Variabel	Expected sign	Coef.	Sig.
(Constant)		-0.009	0,265
UEit	+	0.001	0.000
Prop_ Female	+	0.018	0.385

UEit*Prop_Female	+	0.005	0.011
Aktiviytity_AC	+	5.973E-5	0.903
UEit* Aktiviytity_AC	+	0.000	0.004
DER	-	-0.001	0.848
N		317	
F		7.759	0,000
R Square		0.361	
Adjusted R Square		0.131	

Note: The classic assumption test results do not have autokorelasi, heteroscedasticity, multicollinearity.

4.4. Discussion

This study examines whether the characteristics of the audit committee play a role in improving earnings informativeness (earnings quality). The characteristics of the audit committee discussed in this study are female audit committee members and audit committee meetings. The analysis in this study used the Sharma et. al. (1981) model. The results of this study found that the two characteristics of the audit committee had no effect on cumulative abnormal returns (CAR).

The interaction between unexpected earnings(UEit) with female audit committee members (UEit*Prop_Female) and audit committee activities (UEit*Aktiviytity_AC) have a positive and significant effect on cumulative abnormal returns (CAR). These results indicate that the two characteristics of the audit committee play a role in increasing earnings informativeness (earnings quality).

5. Conclusions

This study aims to examine whether the audit committee (ie the female audit committee members and the activities of the audit committee) play a role in increasing earnings informativeness (earnings quality). The results of the analysis indicate that the female audit committee members and audit committee activities play a role in increasing earnings informativeness. So, the audit committee (as part of CG) can improve the quality of earnings. The implication of the results of this study is that the existence of an audit committee as part of the implementation of good CG is very necessary in a non-financial company that goes public.

The weakness of this study is that in this study did not consider the topics discussed in each audit committee meeting. In other words this study only considers quantity, not the quality of audit committee meetings. Further research can be carried out by considering the quality of the meeting (the topics discussed at the meeting) of the audit committee so that the conclusions taken can be better.

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