

# **VALUE RELEVANCE OF EARNINGS QUALITY AMONG INDONESIAN PUBLIC COMPANIES**

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## **ABSTRACT**

The objective of this study is to investigate value relevance of earnings quality in Indonesian public companies. This research uses price model, i.e. stock price to represent company value. Value relevance is measured by earnings per share and book value per share, while earnings quality is measured through using earnings management measurement method (abnormal cash flow from operation (Abn. CFO) and abnormal discretionary expense (Abn. DISCR)). Value relevance of earnings quality is measured by the moderation of Abn. CFO and Abn. DISCR to earnings per share and book value per share. Regression analysis on sample of 229 companies from year 2012 to 2014 is used to test the hypothesis. Samples are taken from all company sectors in Indonesia Stock Exchange (IDX). The result shows that earnings quality increases relevancy of earnings per share and book value per share.

**Keyword:** Value relevance, earnings per share, book value per share, stock price, abnormal cash flow from operation, abnormal discretionary expense.

## **ABSTRAK**

Tujuan dari penelitian ini adalah untuk mengetahui relevansi nilai kualitas laba di perusahaan publik yang ada di Indonesia. Penelitian ini menggunakan model harga, yaitu harga saham untuk mempresentasikan nilai perusahaan. Relevansi nilai diukur dengan laba per saham dan nilai buku per saham, sedangkan kualitas laba diukur menggunakan metode pengukuran manajemen laba (arus kas abnormal dari kegiatan operasi (Abn. CFO) dan pengeluaran diskresioner abnormal (Abn. DISCR)). Relevansi nilai dari kualitas laba diukur dengan moderasi Abn. CFO dan Abn. DISCR terhadap laba per saham dan nilai buku per saham. Analisis regresi ini menggunakan 229 perusahaan dari tahun 2012 sampai dengan 2014 untuk menguji hipotesis. Sampel diambil dari semua perusahaan di segala sektor di Bursa Efek Indonesia (BEI). Hasil penelitian menunjukkan kualitas laba meningkatkan relevansi dari laba per saham dan nilai buku per saham.

**Kata kunci:** Relevansi nilai, laba per saham, nilai buku per saham, harga saham, arus kas abnormal dari kegiatan operasi, pengeluaran diskresioner abnormal.

## **INTRODUCTION**

Accounting is common measurement in both small and large business. Business owner can use accounting to measure their company business and operational performance in a accepted and agreeable form of report. The report is called financial statements. It provides numbers of financial information for investors, creditors, and managements to evaluate company's financial performance. Financial statements published by company should be able to disclose the actual condition of the company, so it can be useful for users to make decisions. Useful information for decision making

must be has relevance. It means relevant information is information that has potential to influence the decisions taken, one of the indicators that relevant information is the investor reactions to the announcement of the information that can be observed from the movement of the stock price.

Value relevance as defined by Kargin (2013) is the ability of information disclosed by financial statements to capture and summarize firm value. The concept comes from the research of Ball and Brown (1968) whether accounting information is useful for investor in making decision to invest in a certain company or not. The primary objective of it is to examine whether any relationship between financial statements variable and market variables.

Earnings quantity often gets more attention when it comes to reporting seasons. Investor focusing on price per share will make share price goes up when companies beat earnings estimation, or will make share price fall when it is below estimation. However, smart investors also consider quality of earnings. Earnings quality is a better measure in measuring future earnings performance. Bellovary et al. (2005) define earnings quality as the ability of reported earnings to reflect the company's true earnings and to help predict future earnings.

There is no agreement upon definition or technique to measure the quality of earnings, one company or industry cannot be labeled as having low earnings quality based on one technique measurement (Abdelghany, 2005). Surifah (2010) also agrees with Abdelghany that so far there is no exact measurement or appropriate measure to measure earnings quality of financial statements. There is only approach on how to proxies earnings quality which can make earnings quality measure used by researchers could be different from one another.

Abdelghany (2005) used three basic approaches to measure earnings quality. The first approach is focusing on the variability of earnings based on the idea that managers tend to smooth income because they believe that investors prefer smoothly increased income. Leuz et al. (2003) measures the variability of earnings by calculating the ratio of the standard deviation of operating earnings to the standard deviation of cash from operations. The second approach suggested by Barton and Simko (2002) which is focusing on the idea of earnings surprise as reflected in the beginning balance of net operating assets relative to sales. They provided empirical evidence that firms with large beginning balance of net operating assets relative to sales are less likely to report a predetermined earnings surprise. The simplest technique to measure earnings quality and also the last approach was proposed by Penman (2001) which by is focusing on the ratio of cash from operation to income. This measurement is based on notion that the closeness to cash means higher quality earnings. Researcher is going to use one method out of three used by Abdelghany, which is the last method proposed by Penman (2001).

This study aims to determine whether earnings quality affect value relevance if financial statements published by company listed on IDX. Earnings quality play important role for investor to foresee and predict company future earnings as it can determine the quality of earnings from company's financial statements.

## LITERATURE REVIEW AND HYPOTHESIS

### Clean Surplus Theory

Basic theory used in this research is clean surplus. This theory states that value of the company is reflected in accounting data contained in the financial statements (Ohlson, 1995, and Feltham and Ohlson 1995). Ohlson (1995) model basically connects company's market value (share price) with earnings and book value as well as other information that may affect the value relevance of accounting information. This assessment model is necessary to prove the relationship between accounting information with price or changes in share prices. In general, the model Ohlson (1995) are as follows:

$$P_{it+1} = \alpha_0 + \alpha_1 X_{it} + \alpha_2 b_{it} + \alpha_3 v_{it} + \varepsilon_{it}$$

Where  $P_{it+1}$  is the share price per share at the end of the year t,  $X_{it}$  is earnings per share of company,  $b_{it}$  is book value per share and  $v_{it}$  is information other than earnings and book value of equity.

According to Kothari and Zimmerman (1995) in Indra and Syam (2004), there are two valuation model which are generally used in value relevance research as company performance measurement, which are price model and return model. Both models have the same theoretical foundation, but the results obtained with the use of both of these models are sometimes inconsistent. Price model formula can be seen as follows:

$$P_t = \beta_0 + \beta_1 x_t + \varepsilon_t \dots \dots \dots (1)$$

Where  $P_t$  is stock price at t time,  $x_t$  is accounting information for t period,  $\beta$  is intercept and slope coefficient, and  $\varepsilon_t$  is the error term. This is model which is used in this research. While return model is formulated as follows:

$$R_t = \beta_0 + \beta_1 \Delta x_t / P_{t-1} + \varepsilon_t \dots \dots \dots (2)$$

Where  $R_t$  is stock return at t time,  $\Delta x_t$  is change of accounting information for t period,  $\beta$  is intercept and slope coefficient, and  $\varepsilon_t$  is the error term.

### Value Relevance

Relevant information is information that has a relationship with the problems encountered. Based on Financial Accounting Standards (SAK), information is considered to have relevant quality if it can influence the economic decisions of financial statement users by helping them evaluate past events, present or future, and confirm or correct the results of evaluations that have been done in the past.

Term of value relevance of accounting information derived from the clean surplus theory which states that the value of the company is reflected in the accounting data contained in the financial statements (Feltham and Ohlson, 1995; Ohlson, 1995). Value relevance of accounting information has a meaning that it is the ability of accounting information to explain the value of the company (Beaver, 1968 in Pinasti,

2004). While Gu (2002) proposed similar definition that the value relevance is the ability to explain (explanatory power) accounting information on share prices or share returns. Lev and Zarowin (1999) stated that the value relevance of accounting is characterized by the quality of accounting information.

The more relevant the value of an accounting information the higher the quality of that accounting information, as it reflects the real situation. High quality accounting information indicated by existence of a strong relationship between price / share returns and earnings and book value of equity per share as both accounting information reflects the economic condition of the company (Barth et al, 2008). In general, the value relevance analysis refers to the explanatory power of a regression between price / share returns and net income and book value of equity per share.

### **Earnings per Share, Book Value of Equity per Share, and Earnings Quality**

Earning per share (EPS) is an analysis tool of profitability level of corporation that uses conventional profit conventional. Earning Per Share is one important indicator of company's ratio and is the amount of rupiah earned from each share owned which is obtained by dividing the net profit after tax by the number of outstanding ordinary shares. High earnings per share means that the company performs well, and this will certainly attract the interest of shareholders and prospective shareholders.

Earnings per share has been used by financial analysts for a long time. Calculation of earnings per share can see to future by providing information on earnings per share that may be acquired in the future. Projections for the future period are often made on the basis of last year. Fluctuations and trends in the actual achievement compared with the projections that are closely monitored to see indications of strengths and weaknesses. High company earnings per share make more investors willing to buy the shares, which will cause the share price will increase (Dharmastuti, 2004).

Book value is the value of shares that is based on issuers company. Burgstahler and Dichev (1997) stated that book value obtained from the balance sheets only provide information about the net value of the company's resources and reflects the results of the use of company resources. Therefore, the book value has low value relevance if the activity of the company suffers earnings and profits have more important information as a determinant of equity value.

Book value per share shows net assets held by the shareholders by having one share. Net assets are equal to total shareholders' equity, the book value per share is total equity divided by number of shares outstanding (Indra and Syam, 2004). Information contained in equity section of the capital of a company's balance sheet required by investors or potential investors and management as a material to be analyzed. One of the most important gauges in the analysis of financial statements is to "book value per share" (Jusup, 2001).

Earnings quality in accounting refers to the plausibility of the total profits reported. Knechel et al (2007) stated that the quality of earnings is the assessment of the extent to which a company's earnings can be obtained repeatedly, can be controlled, and worthy banks (eligible to apply credit / loans at banks), among other factors. Earnings quality recognizes the fact that the economic impact of transactions that occur will vary among companies as a function of the basic character of their business, and is variously defined as an income level that indicates whether economic impacts substantially better in estimating cash flows or too unpredictable.

Bellovary et al. (2005) define earnings quality as the ability of earnings to reflect the truth and assist Integration profit forecast earnings in future periods to consider the stability and persistence of earnings. While Schipper and Vincent (2003) defined the quality of earnings as the extent of profit or revenue represents. Hicks included changes in net economic assets other than transactions with owners. Furthermore, Dechow (2010) stated that the sense that the quality of high profits provides more information about the company's financial performance features that is relevant to the specific decisions made by decision-makers.

Several empirical studies have attempted to discover the accounting value relevance of accounting information in order to enhance financial statement analysis. Wang et al. (2013) concluded that earnings per share have the most significant correlation to the stock price on the 60 companies listed on the Shanghai Stock Exchange in 2011. Furthermore, Menaje (2012) concluded that the earnings per share has a positive correlation to the share price of public companies in Philippines. Besides Earning Per Share (EPS), the book value of equity is able to provide value relevance of accounting. Sharma (2011) concluded that the book value per share has a significant impact on the stock market price and Srinivasan (2012) also concluded that the book value per share has positive effect on stock prices of pharmaceutical, energy, IT & ITES and infrastructure company.

Dechow (2010) stated that high quality of earnings quality provides more information about the company's financial performance features that are relevant to the specific decisions made by decision-makers. Dechow (2010) stated that high quality of earnings quality provides more information about the company's financial performance features that are relevant to the specific decisions made by decision-makers. Habib (2004) stated that if investors consider the earnings management as a form of opportunistic behavior, then investors will react negatively. The results showed that earnings management reduces the value relevance of accounting information both on profit and book value of equity.

Based on the results of empirical studies above, hypothesis of the study are:

- H1: Earnings Per Share positively affects stock price.
- H2: Book Value of Equity positively affects stock price.
- H3: Earnings quality strengthens the positive effect of Earnings Per Share to stock price.
- H3a: Earnings quality proxied by abnormal cash flow strengthens the positive effect of Earnings Per Share to stock price.
- H3b: Earnings quality proxied by abnormal discretionary strengthens the positive effect of Earnings Per Share to stock price.
- H4: Earnings quality strengthens the positive effect of Book Value to stock price.
- H4a: Earnings quality proxied by abnormal cash flow strengthens the positive effect of Book Value to stock price.
- H4b: Earnings quality proxied by abnormal discretionary expense strengthens the positive effect of Book Value to stock price.

## RESEARCH METHOD

### Type of Research

In accordance with the subject matter and the purpose of the study, this research is using explanation pattern which is intended to describe the relationship pattern or influence between two or more variables, this kind of relationship can be symmetrical, causal or reciprocal (Sugiyono, 2007). Influence pattern which will be revealed in this study is the effect of earnings per share and book value of equity on share prices when moderated by earnings quality on companies listed in Indonesia Stock Exchange in 2011-2013.

### Population and Samples

Population used in this research is companies listed in Indonesia Stock Exchange from 2011-2013 which total 538. Yamane (1973) in Ferdinand (2006) approach is used in this research as sampling technique to determine the minimum population of research. The result of the calculation is the amount of sample. Minimum sample obtained from Slovin formula is 229 using 5% error term.

**Table 3.1**

**Minimum Sample from Slovin Formula (error terms 5%)**

N o	Type of Industry	Total Company	Ratio	Minimum Sample
1	Agriculture	21	0.42	9
2	Mining	39	0.42	17
3	Basic Industries and Chemicals	63	0.42	27
4	Miscellaneous Industry	40	0.42	17
5	Consumer Goods Industry	73	0.42	31
6	Property, Real Estate, and Building Construction	57	0.42	24
7	Infrastructure, Utilites, and Transportation	53	0.42	23
8	Finance	78	0.42	42
9	Trade, Services and Investment	114	0.42	49
	Total	538		229

After determining the amount of samples, researcher use criteria to select sample:

1. Public companies have published complete annual report in period of 2011 until 2013.
2. Public companies have published financial statement on financial year ended on December 31 and use Rupiah as the currency.

### **Type and Research Data Source**

The research is a quantitative research which uses secondary data collected from Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)). This research uses financial statement as a tool to conduct research which was published from 2011 to 2013. Earnings per share, book value, and earnings quality data are extracted from annual report of firm obtained Indonesia Stock Exchange website.

### **Measurement of Research Variable**

First step before hypothesis testing is conducting regression to measure normal operational cash flow activity. Regression model to determine normal operating cash flow replicated from Roychowdhury (2006) but also is modified by Subekti (2011) research. The formulas are as follows:

$$CFO_t/A_{t-1} = \alpha_0 + \alpha_1(1/Log*A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \epsilon_t$$

Where:

$A_{t-1}$  : Total assets of firm in year end t-1

$S_t$  : Sales of firm in year end t

$\Delta S_t$  : Change of sales of firm at year t compared with sales in year end t-1

$\Delta S_{t-1}$  : Change of sales of firm at year t-1 compared with sales in year end t-2

$\alpha, \beta$  : Coefficient of regression

$\epsilon_t$  : Error term at year end t

$$ABN\_CFO = CFO_t - CFO_t/A_{t-1}$$

and

$$DISCR_t/A_{t-1} = \alpha_0 + \alpha_1(1/Log*A_{t-1}) + \beta(S_{t-1}/A_{t-1}) + \epsilon_t$$

Where:

$A_{t-1}$  : Total assets of firm in year end t-1

$S_t$  : Sales of firm in year end t

$\Delta S_t$  : Change of sales of firm at year t compared with sales in year end t-1

$\Delta S_{t-1}$  : Change of sales of firm at year t-1 compared with sales in year end t-2

$\alpha, \beta$  : Coefficient of regression

$\epsilon_t$  : Error term at year end t

$$ABN\_DISCR = DISCR_t - DISCR_{t-1} / \Delta t$$

This hypothesis testing was tested by (moderated regression analysis). MRA is a form of hierarchical regression designed to determine the relationship between two variables that are influenced by the third variable or moderating (Ferdinand, 2006). Based on the research model then statistical equations used are:

Model 1. Earnings per Share affect share price

$$\text{Share Price} = \alpha + \beta_1 \text{EPS} \dots \dots \dots (1)$$

Model 2. Book Value per Share affect share price

$$\text{Share Price} = \alpha + \beta_2 \text{BVPS} \dots \dots \dots (2)$$

Model 3. Earnings per Share affect share price if moderated by earnings quality

$$\text{Share Price} = \alpha + \beta_1 \text{EPS} + \beta_3 \text{Earnings Quality} \dots \dots \dots (3)$$

$$\text{Share Price} = \alpha + \beta_1 \text{EPS} + \beta_3 \text{Earnings Quality} + \beta_4 \text{EPS} * \text{Earnings Quality} \dots (4)$$

Model 4. Book Value per Share affect share price if moderated by earnings quality

$$\text{Share price} = \alpha + \beta_2 \text{BVPS} + \beta_3 \text{Earnings Quality} \dots \dots \dots (5)$$

$$\text{Share price} = \alpha + \beta_2 \text{BVPS} + \beta_3 \text{Earnings Quality} + \beta_5 \text{BVPS} * \text{Earnings Quality} \dots \dots \dots (6)$$

Hypothesis testing is tested based on t value analysis, which resulted from MRA (moderated regression analysis). With significance level  $\alpha = 5\%$  and with degree of freedom (k) and (n-k) where n is observation total and k is independent variable.  $t_{\text{calculate}}$  formulated as follows (Sugiyono, 2006):

$$t_{\text{calculate}} = \beta_{1,2,3,4,5} / S_e \beta_{1,2,3,4,5}$$

Where:

$\beta_{1,2,3,4,5}$  = regression coefficient

$S_e \beta_{1,2,3,4,5}$  = Standard error of regression coefficient



Hypothesis formula mathematically is as follows:

$H_0$ : If  $\beta$  is smaller or same as zero then EPS, BV, and earnings quality does not have value relevance.

$H_a$ : If  $\beta$  is bigger than zero then EPS, BV, and earnings quality do have value relevance

With significance level  $\alpha = 5\%$ , then if  $t_{\text{calculate}} > t_{\text{table}}$  then  $H_0$  is denied and  $H_a$  is accepted or if probability (Sig.)  $t < 5\%$  then  $H_0$  is denied and  $H_a$  is accepted.

## RESULT ANALYSIS

### Descriptive Statistic

This study uses two proxy of earnings quality, which is based on the real activity of the company operations which include abnormal cash flow from operation (Abn. CFO), and abnormal discretionary expenses (Abn. DISCR). The determination of earnings quality proxy by earnings management is based on studies conducted by Venola (2008) that the high earnings management practices will cause poor quality of reported earnings, or earnings does not have earnings power response, which will degrade the earnings quality the company. In order to obtain a positive relationship, abnormal cash flow from operations (Abn. CFO) and abnormal discretionary expenses (Abn. DISCR) indicator multiplied by negative one (-1). Descriptive statistics of research data is presented in Table 4.1.

**Table 4.1**  
**Descriptive Statistics of Research Data (Abn. CFO and Abn. DISCR)**  
**(000.000)**

<b>Research Data</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
Sales	13.876	13.970	2.102	5.77	20.82
$\Delta$ Sales	12.323	12.397	2.310	4.57	19.11
Asset	14.346	14.194	1.824	8.98	20.28
Log Asset	1.785	1.803	0.161	0.98	2.20
CFO	11.426	11.354	2.149	4.37	17.43
DISCR	11.736	11.587	1.713	7.31	17.67

This study applies the logarithm adjustment on total asset value from each estimation model. The purpose of this adjustment is to obtain better analysis results. The adjustment of the  $1 / At-1$  variable must be adjusted to  $1 / \text{Log } At-1$ . Estimation model in order to obtain regression parameter after adjustment are as follows:

1. Cash Flow of Operation Activity

$$\text{CFO}_t/\text{A}_{t-1} = \alpha_0 + \alpha_1(1/\text{Log A}_{t-1}) + \beta_1(\text{S}_t/\text{A}_{t-1}) + \beta_2(\Delta\text{S}_t/\text{A}_{t-1}) + \epsilon_t$$

2. Discretionary Expense Activity

$$\text{DISEXP}_t/\text{A}_{t-1} = \alpha_0 + \alpha_1(1/\text{Log A}_{t-1}) + \beta(\text{S}_{t-1}/\text{A}_{t-1}) + \epsilon_t$$

**Classical Assumption Test**

Multicollinearity test in this study use Variance Inflation Factor (VIF) value obtained from testing. This multicollinearity assumption test results are presented in Table 4.2 below:

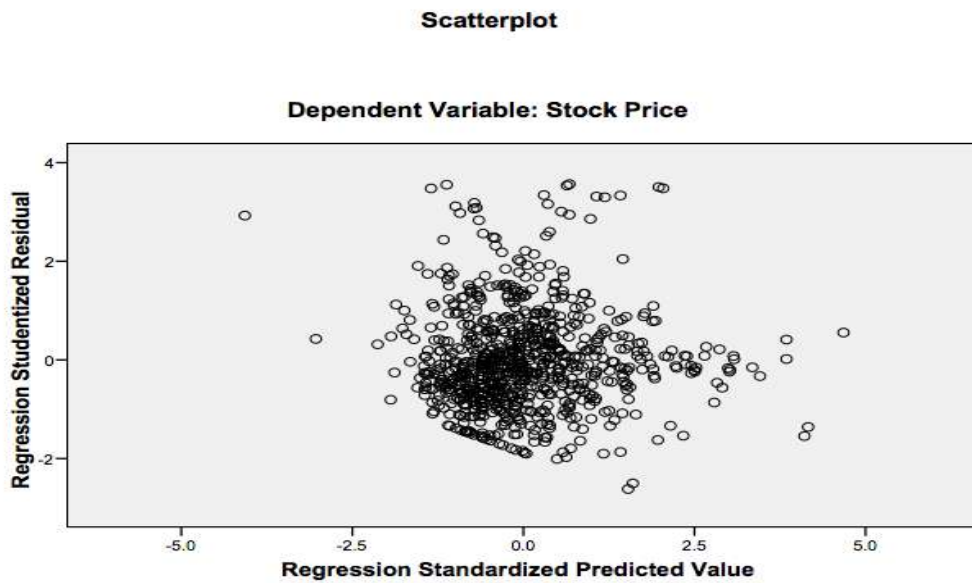
**Table 4.2**  
**Multicollinearity Test Result**

No	Variable	VIF	Explanation
<b>Model 1</b>			
1	EPS	1.414	Non-Multicollinearity
2	BV	1.414	Non-Multicollinearity
<b>Model 2</b>			
			Non-Multicollinearity
1	EPS	1.429	Non-Multicollinearity
2	BV	1.425	Non-Multicollinearity
3	Abn.CFO	1.394	Non-Multicollinearity
4	Abn. DISCR	1.396	Non-Multicollinearity
<b>Model 3</b>			
			Non-Multicollinearity
1	EPS	3.329	Non-Multicollinearity
2	BV	1.130	Non-Multicollinearity
3	Abn.CFO	1.845	Non-Multicollinearity
4	Abn. DISCR	2.933	Non-Multicollinearity
5	EPS* Abn.CFO	2.048	Non-Multicollinearity
6	EPS* Abn. DISCR	2.561	Non-Multicollinearity
7	BV * Abn.CFO	2.601	Non-Multicollinearity
8	BV * Abn. DISCR	6.601	Non-Multicollinearity

Based on Table 4.4, it can be concluded that the model in this study does not contain multicollinearity problem because the Variance Inflation Factor (VIF) is below the criterion of multicollinearity problems, which is 10. Thus, the data can provide different information for each independent variable.

Heteroscedasticity in this research is tested by Spearman's correlation rho between residue value (disturbance error) and regression result with each independent variable. One of the criteria of the existence of heteroscedasticity symptom is if Spearman's correlation rho value is under 0.7 so it means regression model show if there is any heteroscedasticity problem (Gujarati, 2012). The heteroscedasticity assumption test results are presented in Figure 4.1 below.

**Figure 4.1**  
**Heteroscedasticity Test Results**



Based on the figure 4.1 in this study indicate scatter plot is spreaded and does not form a specific pattern, so it can be concluded there is no heteroscedasticity problem.

Autocorrelation test will be carried out based on Durbin Watson value. If  $DW_{upper} < DW_{Statistics} < 4 - DW_{upper}$ , the regression model is free from autocorrelation problem. Vice versa, if  $DW_{Statistics} < DW_{upper}$  or  $DW_{Statistics} > 4 - DW_{lower}$ , the regression model contain autocorrelation problem (Gujarati, 2012). The autocorrelation test results are presented in Table 4.3 below.

**Table 4.3**  
**Autocorrelation Test Results**

Description	Durbin Watson Value
$DW_{Statistic}$	1.832
$DW_{Upper (table)}$	1.722
$4 - DW_{Upper (table)}$	2.278
$DW_{Lower (tabel)}$	1.627

Autocorrelation classical assumption test results conclude that the regression model established in this study does not contain autocorrelation. Thus, the regression model used to test the hypothesis in this study is accurate or authentic. This means that the magnitude of error or disturbance in the regression model this study did not correlate with each other.

### Hierarchical Regression Results

Analysis result based on hierarchical regression is presented on table 4.4.

**Table 4.6**  
**Hierarchical Regression Results**

Variable	Model 1	Model 2	Model 3
EPS	0.087*	0.1048	0.113*
t-value	(2.137)	(1.246)	(1.963)
BV	0.189**	0.159**	0.450**
t-value	(4.664)	(4.147)	(3.567)
Abn.CFO		0.144**	0.293*
t-value		(3.795)	(2.708)
Abn. DISEXP		0.222**	0.087
t-value		(5.828)	(1.619)
EPS*ABN_CFO			0.098*
t-value			(2.179)
EPS*ABN_DISEXP			0.137*
t-value			(2.717)
BV* ABN_CFO			0.657**
t-value			(3.905)
BV*ABN_DISEXP			0.225*
t-value			(2.900)
F Change	26.220**	38.767**	25.921**
Adjusted R <sup>2</sup>	0.058	0.157	0.197
Model I : $P = \alpha + \beta_1 \text{EPS} + \beta_2 \text{BV} + e$			
Model II : $P = \alpha + \beta_1 \text{EPS} + \beta_2 \text{BV} + \beta_3 \text{Abn.CFO} + \beta_4 \text{Abn. DISEXP} + e$			
Model III : $P = \alpha + \beta_1 \text{EPS} + \beta_2 \text{BV} + \beta_3 \text{Abn.CFO} + \beta_4 \text{Abn.DISEXP} + \beta_5 \text{EPS*Abn.CFO} + \beta_6 \text{EPS *Abn.DISEXP} + \beta_7 \text{BV*Abn.CFO} + \beta_8 \text{BV*Abn. DISEXP} + e$			

\*Significant at 5% level, \*\*Significant at 1% level

## Hypothesis Test Results

The value of the coefficient in model 1 to the effect of earnings per share on stock price is 8.7% and significant at 5% level. It means that earnings per share has an influence on stock price, so the hypothesis of earnings per share has value relevance can be accepted and value of the coefficient in model 1 to the effect book value of equity on stock price is 18.9% and significant at 1% level. It means that book value of equity has an influence on stock price, so the hypothesis that the book value of equity has value relevance can be accepted.

The coefficient value of abnormal cash flow (ABN\_CFO) of operating activities moderate the influence of earnings per share on stock price by 11.3%, while earnings per share effect on stock price without moderated by abnormal cash flow (ABN\_CFO) amounted to 8.7%. These results indicate that the presence of abnormal cash flow (ABN\_CFO) increase the coefficient value of earnings per share effect on stock price and generate a positive coefficient. If it is associated with hypothesis testing, abnormal cash flow (ABN\_CFO) of operating activities can strengthen the effect of earnings per share on stock price and it agrees with the hypothesis.

The coefficient value of abnormal discretionary expense (ABN\_DISCR) moderate the influence of earnings per share on stock price by 13.7%, while earnings per share effect on stock price without moderated by abnormal discretionary expense (ABN\_DISCR) amounted to 8.7%. These results indicate that the presence of abnormal discretionary expense (ABN\_DISCR) increase the coefficient value of earnings per share effect on stock price and generate a positive coefficient. If it is associated with hypothesis testing, abnormal discretionary (ABN\_DISCR) can strengthen the effect of earnings per share on stock price and it agrees with the hypothesis.

The coefficient value of abnormal cash flow (ABN\_CFO) of operating activities moderate the influence of book value of equity on stock price by 65.7%, while book value of equity effect on stock price without moderated by abnormal cash flow (ABN\_CFO) amounted to 18.9%. These results indicate that the presence of abnormal cash flow (ABN\_CFO) increase the coefficient value of book value of equity effect on stock price and generate a positive coefficient. If it is associated with hypothesis testing, abnormal cash flow (ABN\_CFO) of operating activities can strengthen the effect of book value of equity on stock price and it agrees with the hypothesis.

The coefficient value of abnormal discretionary expense (ABN\_DISCR) moderate the influence of earnings per share on stock price by 13.7%, while earnings per share effect on stock price without moderated by abnormal discretionary expense (ABN\_DISCR) amounted to 8.7%. These results indicate that the presence of abnormal discretionary expense (ABN\_DISCR) increase the coefficient value of earnings per share effect on stock price and generate a positive coefficient. If it is associated with hypothesis testing, abnormal discretionary (ABN\_DISCR) can strengthen the effect of earnings per share on stock price and it agrees with the hypothesis.

The coefficient value of abnormal discretionary expense (ABN\_DISCR) moderate the influence of book value of equity on stock price by 22.5%, while earnings per share effect on stock price without moderated by abnormal discretionary expense (ABN\_DISCR) amounted to 18.9%. These results indicate that the presence of abnormal discretionary expense (ABN\_DISCR) increase the coefficient value of book value of equity effect on stock price and generate a positive coefficient. If it is associated with hypothesis testing, abnormal discretionary (ABN\_DISCR) can

strengthen the effect of book value of equity on stock price and it agrees with the hypothesis.

## **CONCLUSION, LIMITATION OF RESEARCH AND SUGGESTION**

Based on the research conducted, it can be concluded that earnings per share have value relevance. This shows that companies with high EPS value will attract more investors so that company with high EPS will have high share price as more investors will be attracted to invest in that company. The same goes with book value of equity. Results indicate that the book value of equity has value relevance. When book value of equity increases, it will boost stock price and if the book value of equity decreased, share price will decline.

Earnings quality proxied by abnormal cash flow (ABN\_CFO) of operating activities is able to moderate the effect of earnings per share to stock price. Earnings per share have value relevance if supported by abnormal cash flow (ABN\_CFO) of operating activities. Earnings quality proxied abnormal operating activities cash flow (ABN\_CFO) is also able to moderate the influence of book value of equity on stock prices. Book value of equity has value relevance if it is supported by earnings quality proxied by abnormal cash flow (ABN\_CFO) of operating activities.

Earnings quality proxied by abnormal discretionary expenses (ABN\_DISCR) is able to moderate the effect of earnings per share to stock price. Earnings per share have value relevance if it is supported by abnormal discretionary expenses (ABN\_DISCR). Earnings quality proxied by abnormal discretionary expenses (ABN\_DISCR) is also able to moderate the effect of book value of equity to stock price. Book value of equity has value relevance if it is supported by abnormal discretionary expenses (ABN\_DISCR).

In order to measure earnings quality, earnings management measurement is used. There are three formulas, which are abnormal cash flow, abnormal discretionary expense, and production cost. Limitation of this study is proxy used in the measurement of earnings quality are only used two out of three formulas. The decision is taken to only use two out of three formulas because samples of this research cover all sectors. As one formula is can only use to measure sector that producing goods, sectors other than sector that is producing cannot use the formula. In order to use all sectors samples, there are only two formulas used.

The development of new formula can be used to measure earnings quality wholly in all sectors and not also in using cash flow of operating activities. Cash flow of financing and investing activities might be can be used to measuring earnings quality so earnings quality research results can be done accurately.

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