The Effects of Good Corporate Governance and Financial Leverage on Earnings Quality with Book-Tax Differences as Moderation Variables
(Study of Manufacturing Companies in the Indonesian Stock Exchange)

Lilis Maryasih[1*], Azhar Maksum[2], Bastari[3], Muammar Khadafi[4]

[1,2,3,4] Faculty of Economics and Business, Universitas Sumatera Utara

*Corresponding Author: Lilis Maryasih, e-mail: lilis.maryasih@gmail.com

Abstract
This study aimed to find out and analyze the variables that affect earnings quality by including book-tax differences as a moderating variable to see the relationships between variables. The model testing in this study was carried out on 91 listed companies on the Indonesia Stock Exchange within the period of 2007-2016. The data obtained were analyzed using e-views 10 and a random effect model was obtained where the random effect estimation model was used to examine the effect of Good Corporate Governance (GCG) and Financial Leverage with Book Tax Differences as moderating variables. The results showed that there was a positive and significant effect among good corporate governance variables on earnings quality, and there was a positive and significant effect between financial leverage variables on earnings quality. To see the effect of the book-tax differences in variable as a moderating variable, MRA was used.The results obtained to state that the book-tax differences variable strengthens the relationship between good corporate governance and earnings quality. The variables of book-tax differences do not strengthen or weaken the relationship between financial leverage and earnings quality,

Keywords: *Good corporate governance, financial leverage, book-tax differences, and earnings quality.*

1. Introduction

The definition of quality of financial is still diverse; however, in principle, the definition of quality of financial reporting information can be viewed from two perspectives. The first view states that the quality of financial reporting information is related to the company's overall performance which is reflected in the company's earnings. This view holds that high-quality earnings reflected in the profit can be sustainablefor a while. The second view states that the quality of financial reporting information is related to the performance of the capital market which is manifested in the form of rewards so that the stronger relationship between company profits, the higher quality of financial reporting information that the rewards shows (Ayres, 1994). The same view is carried out by Schipper & Vincent (2003) by calling it accounting-based attributes for the first view, and market-based attributes for the second view.

The first view states that the quality of financial reporting information is closely related to the proportion of losses manifested in company profits earned in the current year. Financial reporting information is said to be high quality if current year earnings can be a good indicator of future company profits (Beneish & Vargus, 2002; Lev & Thiagarajan, 1993; Penman & Zhang, 2002; Richardson, 2006) or strongly associated with operating cash flows in the future (Dechow et al., 2010). This view implies that the focus of measuring the quality of the company's financial reporting information is related to the characteristics of financial reporting.
The second view states that the quality of financial reporting information is related to the performance of company shares in the capital market. The stronger relationship between earnings and market rewards shows that the quality of financial reporting information is getting higher ((Lev & Thiagarajan, 1993; Nariman & Ekadjaja, 2018) Thus, the quality of financial reporting information is a construct that can be analyzed in two views, namely quality in

financial reporting formations relating to cash and profit itself, and the quality of financial reporting information relating to share returns. The construct of the quality of financial reporting information cannot be directly observed but can be observed and measured through proxies or attributes inherent in the earnings itself.

The survey conducted shows that the value assigned to companies in Indonesia for implementing Good Corporate Governance or GCG is still low, compared to that of other Asian countries. Good Corporate Governance is corporate governance that explains the relationship between various participants in the company and determines the direction of company performance. The implementation of good corporate governance and the following applicable regulations will make investors respond positively to company performance and company market value (Santoso & Muid, 2014).

There have been several previous studies on this topic. First, the results of research by Younis et al. (2016) on the effect of good corporate governance on earnings quality are proxied by the size of the board of commissioners and audit quality in companies listed on the Stock Exchange in Pakistan found that there is a significant negative effect on earnings quality and other results indicate size companies and earning management have a positive and significant effect on earnings quality. Second, the results of research by Meampol et al. (2013) prove that high good corporate governance will affect the quality of earnings to be high. In other words, it has a positive effect. This research was conducted on companies listed on the Thailand Stock Exchange.

Capital structure is an illustration of the form of the company's financial proportion, namely between the capital owned by long-term liabilities and shareholders equity which is the source of a company's financial (Fahmi, 2013). Capital structure is measured by the level of leverage (Hossain et al., 2012). The capital structure as measured by leverage is a variable to determine how much the company's assets are financed by the company's debt. Debt owed by the company is related to the profits the company will get (Keshtavar et al., 2013). *Leverage* is a financial ratio that describes the relationship between company debt to capital and company assets. This ratio can see the extent to which the company is financed by debt or external parties with the company's capabilities as described by capital. A good company should have more capital than debt. A high level of ratio leverage means that the company uses high debt and this means that the company's profitability will increase, but on the other hand, high debt will increase the risk of bankruptcy. Creditors prefer this ratio to below value because of the lower ratio, the greater the protection against losses from liquidation events, while share-holders expect the degree of leverage a large to increase profits.

The difference in the calculation of profit according to accounting and fiscal will cause a difference in profit or what is called book-tax differences (BTD). BTD can arise from various sources, they are: 1) earnings management and tax avoidance; and 2) the existence of differences in regulations between accounting and taxes (Tang & Firth, 2012). Research conducted by Hanlon (2005) found that large book-tax differences (LBTD) harmed earnings relevance. Investors interpret large book-tax differences as an indication that companies perform earnings management and tax avoidance which negatively affect earnings relevance. Blaylock et al. (2012) argue that if the accrual applied for accounting purposes is different from the tax purpose, it can increase a company's deferred tax burden. This increase in deferred tax expense indicates that the company has a large temporary BTD. Thus, the larger the temporary BTD can reflect the larger accruals applied for accounting purposes. The variable book-tax differences in this study have a position as a moderating variable. The moderation variable is used to assess whether the relationship between the dependent variable and the independent variable gets stronger or weaker in the presence of the moderating variable. Researchers examined how the influence of good corporate governance and leverage on earnings quality when the company has book-tax differences, both large, positive, negative, and small.

2. Methods

Research method is the method used by researchers during investigations to solve problems. In terms of time horizon, this study is included in the study group of cross-sectional study. In cross-sectional studies, a study is carried out with one-time data collection; it is possible that it can be daily, weekly, or monthly, to answer research questions (Sekaran and Bogie, 2010). It is a manufacturing company listed in the Indoneia Stock Exchange in 2007 - 2016, totalling 144 companies, where the target population is defined as part of elements, geographic circles, and times (Sekaran & Bougie, 2013). The number of companies sampled in this study was 91 manufacturing companies listed in the Indonesia Stock Exchange in 2016. The data collection technique is secondary data from the annual reporting of company.

Quality of Income (Y)

The measurement used in this study is the *Earning Quality Model* developed by Weber (2008), which can be seen as follows:

$$\textit{Quality of Income} = \frac{CashFlowfromOerating\ (CFO)}{EarningBeforeIncomeTax(EBIT)} \ldots\ldots\ldots\ (1)$$

Good Corporate Governance (X_1)

The mechanism for good corporate governance in the company to comply with good corporate governance regulations consists of the composition of the board of directors and ownership structure. To measure the amount of GCG, the following formula was used:

$$\text{GCG} = \frac{\text{Number of GCG mechanisms in the Company}}{\text{Number of GCG Mechanisms}} \text{ X } 100 \ldots\ldots\ldots\ (2)$$

Financial Leverage (X_2)

Financial Leverage shows the extent to which the company has long-term and short-term debt compared to the total assets owned to figure out the company's funding policy. Leverage is measured using the followin formula:

$$Leverage = \frac{total\ hutangjt}{totalassetjt} \ldots\ldots\ldots\ (3)$$

Book Tax Differences (X_3)

The moderating variable is a variable whose existence is measured, manipulated, and selected by the researcher to determine whether these variables change the relationship between the independent variable and the dependent variable (Sarwono and Elly, 2010). The moderating variable also affects (either weakens or strengthens) the relationship between the independent and dependent variables. The moderating variable in this study is book-tax differences, which is the difference between accounting profit and fiscal profit. The variable book-tax differences (BTD) used in this study was obtained from calculations using the procedure according to Jackson (2015) as follows:

$$BTD = \frac{(NetIncome - TaxableIncome)}{averageAsset} \text{ ………. (4)}$$

Data Testing

This study was designed to obtain empirical evidence regarding the effect of good corporate governance and financial leverage on earnings quality as moderated by book-tax differences. The data used in this study is panel data, which is a combination of data cross-section and time series. Data testing was performed using panel data regression with the help of software E-views 10. To test the effect of moderation using Moderated Regression Analysis (MRA). Before conducting panel data regression analysis, it is necessary to first select the estimation method and descriptive statistics. This aims to ensure the accuracy of the data. In the following is provided the equation of Linear Regression.

$$EQ = \alpha + \beta_1 \text{ GCG} + \beta_3 \text{ LEV} + \beta_5 \text{ BTD ……. (1)}$$

$$\boxed{EQ = \alpha + \beta_1 \text{ GCG} + \beta_3 \text{ LEV} + \beta_5 \text{ BTD} + \beta_6 \text{ GCG*BTD} + \beta_8 \text{ LEV*BTD} + \varepsilon_2 \text{ …2}}$$

3. Results and Discussion

Panel Data Regression Model Selection

As mentioned earlier, in panel data analysis, there are three models offered, namely the Ordinary Least Square (common effect), fixed-effect models (fixed-effect), and random effects model(random-effect). There are two tests used to determine the most appropriate technique for estimating panel data regression. First, the significance test fixed effect (Chow Test) is used to choose between the common effect or the fixed effect. Second, the Hausman test is used to choose between a fixed effect or a random effect. Hausman Test is used to determine which model fixed effect or random effect is to use. The decision-making criteria are as follows:

a. Probability (p-value) Cross-section random ≤ 0.05 = fixed effect
b. Probability (p-value) Random Cross-Section > 0.05 = random effect

The results of chow test and the Hausman test are presented in the table below.

Table 1. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.886132	(90,810)	0.0000
Cross-section Chi-square	173.141284	90	0.0000

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.155037	9	0.3381

From the tables above, it can be seen that the probability value (p-value) of a random cross-section is 0.3381. Based on these data, it can be concluded that the model random effect is better than the model fixed effect. Therefore, the hypothesis is tested using the estimation model random effect to test the effect of GCG and Financial Leverage on Earning Quality with Book Tax Differences as moderating variables.

Hypothesis Test

Hypothesis test aims to find out the effect of each independent variable, namely Good Corporate Governance, Firm Size, Financing Leverage, Liquidity and Book Tax Differences, on the dependent variable, namely Earning Quality. The partial test results for all variables are presented in Table 3 below.

Table 3. t-test with Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GCG?	0.019925	0.005259	3.788518	0.0002
FINANCIAL_LEV?	0.154656	0.071668	2.157944	0.0312
BTD?	0.775848	0.478969	1.619828	0.1056
C	-0.277204	0.714022	-0.388229	0.6979
R-squared	0.019283	Mean dependent var		0.745812
Adjusted R-squared	0.009476	S.D. dependent var		1.537562
S.E. of regression	1.530260	Sum squared resid		2107.525
F-statistic	1.966211	Durbin-Watson stat		1.788769
Prob(F-statistic)	0.040211			
Unweighted Statistics				
R-squared	0.021158	Mean dependent var		1.021305
Sum squared resid	2292.516	Durbin-Watson stat		1.644427

Based on the test results, the results obtained if sig. t on the variable good corporate governance on earnings quality of 0.0002, which means that the sig. t level is less than 0.05. The resulting coefficient is positive (+) 3.788518. From the test results, it can be concluded that there is a positive and significant effect between good corporate governance on earnings quality in manufacturing companies in Indonesia in 2007-2016. Later, the results obtained if sig. t on the variable financial leverage on earnings qualityis 0.0312, which means that the sig.t level is less than 0.05. The resulting coefficient is positive (+) 2.157944. From this test result, it can also be concluded that there is a positive and significant influence between the variable financial leverage *on* the earnings quality of manufacturing companies in Indonesia in 2007-2016. Finally, the results obtained if sig. t in the variable book-tax differences on earnings quality is 0.1056, which means that the sig.t level is greater than 0.05. The resulting coefficient is positive (+) 1.619828. From the test results, it can be concluded that there is a positive and insignificant influence between the variable book-tax differences in earnings quality in manufacturing companies in Indonesia in 2007-2016.

The Coefficient of Determination (R2)

Table 4. The Coefficient of Determination (R2)

R-squared	0.019283	Mean dependent var	0.745812
Adjusted R-squared	0.009476	S.D. dependent var	1.537562
S.E. of regression	1.530260	Sum squared resid	2107.525
F-statistic	1.966211	Durbin-Watson stat	1.788769
Prob(F-statistic)	0.040211		

The coefficient of determination (R2) is used as an analytical tool to demonstrate the contribution of independent variables in influencing the dependent variable. The coefficient of determination is often defined as the ability of all independent variables to explain variance from the dependent variable. From the test results, it was found that the R-squared value was 0.019283. This figure shows that the dependent variable is influenced by the independent variable by 1.9 per cent, while the remaining 98.1 per cent is influenced by other variables outside the research model.

4. Conclusions

Based on the research findings and the discussion above, it can be concluded that good corporate governance and financial leverage have a positive effect on earnings quality. Book tax differences, on the other hand, have no positive effecton earnings quality. Regarding the book-tax difference as a moderating variable, it was found to have weakened the effects of good corporate and financial leverage on earnings quality.

References

Ayres, F. (1994). Perceptions of earnings quality: What managers need to know. *Management Accounting*, *75*, 27.

Beneish, MD, & Vargus, ME (2002). Insider trading, earnings quality and accrual mispricing. *Accounting Review*, *77*(4), 755–791. Retrieved from https://doi.org/10.2308/accr.2002.77.4.755

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, *50*(2–3), 344–401. Retrieved from https://doi.org/10.1016/j.jacceco.2010.09.001

Nariman, A., & Ekadjaja, M. (2018). The implications of corporate governance, investment opportunity set, firm size, and leverage on earnings quality. *Journal of Economics*, *23*(1), 33–47. Retrieved from https://doi.org/10.24912/je.v23i1.332

Penman, S. H., & Zhang, X. J. (2002). Accounting conservatism, the quality of earnings, and stock returns. *Accounting Review*, *77*(2), 237–264. Retrieved from https://doi.org/10.2308/accr.2002.77.2.237

Richardson, G. (2006). *Determinants of tax evasion: A cross-country investigation*. *15*, 150–169. Retrieved from https://doi.org/10.1016/j.intaccaudtax.2006.08.005

Schipper, K., & Vincent, L. (2003). Earnings Quality.*Accounting Horizons, 17,* 97–110.