

# The Effect of Bonuses, Cost of Debt, Tax Avoidance, and Corporate Governance on Financial Reporting Aggressiveness: Evidence from Indonesia

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This study examines the effect of bonuses, cost of debt, tax avoidance, and corporate governance, on financial reporting aggressiveness. This research is quantitative research with multiple linear regression models. The sample employed in this research is all companies listed on the Indonesian Stock Exchange (IDX), excluding financial companies and companies from sectors that receive special treatment in taxation, namely the property, construction, real estate, shipping, aviation and oil and gas sectors. The samples selection is from 2012 to 2017, using a purposive sampling method, with the number of samples amounting to 260 observations. The model examination is conducted by panel data regression with a fixed effect model. The results suggest that the cost of debt and corporate governance is negatively associated with financial reporting aggressiveness, while tax avoidance is positively associated with financial reporting aggressiveness. Furthermore, bonuses are not associated with financial reporting aggressiveness.

**Key words:** *financial reporting aggressiveness, bonuses, cost of debt, tax avoidance, corporate governance.*

## Introduction

Indonesia Financial Accounting Standards (from now on called as PSAK) No. 1 (IAI, 2015) states that the purpose of financial statements is to provide information about the financial position, financial performance, and entity cash flows, that allow the users of such to make economic decisions. Financial statements also show the results of management's responsibility for the use of resources entrusted to them. Management as the 'agents' who run the company's operations, must fairly present the company's financial and non-financial information. However, the agent has more complete information than the principal. The agent is incentivised to only report information that is able to maximize management goals, whether it is their management interests (opportunistic) or corporate interests (Holthausen, 1990, David and Jake, 2017, David and Jake, 2017, David, 2017, Dincer and Kiliç, 2018, Dunst et al., 2018). As a result, this may lead to wrong decisions being made due to the number manipulation carried out by management.

The phenomena of financial report manipulation is not new. In 2001, Enron, a gas company and the seventh largest company in the United States, was proven to have reported improper earnings in its' financial statements. By using the Special Purposes Vehicle, Enron hid its' debt records to prove that it had exceeded its' income of around \$586 million since 1997. While in Indonesia, one of the State-Owned Enterprises, PT Kereta Api Indonesia, was found to be fraudulently presenting financial statements. PT KAI recorded profits in the financial statements of Rp 6.9 billion. After being investigated, the company suffered a loss of Rp 63 billion due to the company recording Tax Assessment Letters as a receivable or bill to customers.

Public and private companies in Indonesia have also been found to be carrying out financial report manipulation. The Indonesian Capital Market Supervisory Agency found that PT Bank Lippo published three versions of financial statements as of September 30, 2002, all of which were declared as audited. These financial statements were to be advertised in newspapers, submitted to the Jakarta Stock Exchange (JSX), and submitted by KAP Prasetio, Sarwoko, & Sandjaja to the management of PT Bank Lippo Tbk. In the financial statements to be advertised, the company declared a current year profit of Rp 98.77 billion. Whereas in the report to the JSX, the company stated that it experienced a net loss of Rp 1,273 trillion (Bapepam, 2003).

Based on these cases, it can be stated that aggressive financial reporting practices can occur not only in public companies, developed countries, or in government, but also in developing countries, private companies, and well-known corporations. Aggressive financial reporting practices must be considered as a latent hazard in every organization because they can harm various stakeholders. Kamarudin et al. (2012) stated that companies that were proven to have

manipulated financial statements, had implemented aggressive financial reporting practices for the two years prior to the fraud. This suggests an urgency in finding out the characteristics of a company that have been aggressive in their financial reporting.

The term financial reporting aggressiveness was first used by Frank et al. (2009), who examined financial reporting aggressiveness with tax aggressiveness. The study used performance-matched discretionary accruals (DFIN) as a measure of financial reporting aggressiveness. Dechow et al. (1995) stated that discretionary accrual is the most commonly used proxy to measure earnings management activities, including research conducted in Indonesia (Suhardianto & Harymawan, 2011). Thus, most researchers equate earnings management actions with financial reporting aggressiveness.

However, discretionary accruals have long been regarded as proxies of earnings management that are noisy, or have a lot of disturbances, because they use the full estimate-based approach. As a result, research often produces low-strength results and is biased for certain non-random samples (Mcnichols & Stubben, 2018). Therefore, in order to be able to provide added value, this study attempts to develop alternative research models, with the proxy of aggressive financial reporting, other than using accrual-based models, namely by using the Beneish M-Score model which has been used in detecting companies that manipulate financial reports in the United States (Beneish, 1999), Italy (Magazzino & Paolone, 2015), India (Kaur, Sharma, & Khanna, 2014), Germany and Finland (Kristina, 2016), and Vietnam (Anh & Linh, 2016).

To capture the factors that influence financial reporting aggressiveness, this study is based on hypotheses that already exist in positive accounting theory, especially those developed by Watts & Zimmerman (1978), namely bonus plan hypothesis, debt covenant hypothesis, and political cost hypothesis. Companies that have a bonus plan tend to choose accounting methods and policies that can improve accounting performance by choosing accounting procedures that can transfer reported earnings from the coming period to the current period. This hypothesis is supported by the research of Healy (1985), which stated that rewards in the form of earning-based bonuses, could influence managers in making accounting decisions. Meanwhile, the level of the company's cost of debt is another determinant that is feasible for testing. Cost of debt is the effective rate of return requested by the creditor in return for loaned funds. Barton & Waymire (2004) state that companies tend to improve their reporting quality along with increasing leverage. With increasing quality of reporting, the goal is that companies will be seen as a low risk, so that they are given a decrease in the cost of debt and are subsequently protected from violations of debt covenants.

The political cost hypothesis states that companies tend to reduce political costs that must be borne by the company, such as tax expenses. Frank et al. (2009) proved that companies that

carry out tax avoidance could act aggressively in their financial reporting. These results reject the previous theory which stated that there are trade-offs in reporting taxable profits and profits in accounting reporting. This study also takes into account other determinants, such as corporate governance. By the purpose of its implementation, corporate governance is expected to be able to control and supervise all aggressive financial reporting actions, which of course can reduce investor confidence in the company. In this study, corporate governance indexes are used to capture the full function of corporate governance that is not limited to specific mechanisms such as is the case with previous research.

This research examines the effects of bonuses, cost of debt, tax avoidance, and corporate governance on financial reporting aggressiveness. Financial reporting aggressiveness is measured by the Beneish M-Score, which is a model that combines accruals with financial ratios and indices. This model is expected to be an alternative and an answer to criticism of accrual-based models that employ the full estimation approach. Also, a robustness check will be conducted in this study to identify whether there is a difference between the aggressiveness of overall financial reporting and earnings management in general.

### **Hypothesis Development**

Bonuses are rewards set by the company to motivate employees to improve performance and ultimately achieve company goals. The bonus mechanism is often based on accounting numbers in financial statements which describe the company's performance through measures such as net income and earnings per share. As a result, there is a tendency for managers to act opportunistically by choosing select accounting methods and policies, so that they can divert profits that should be reported for the coming period, to profit for the current period. This view is what is expressed in the Bonus Plan Hypothesis in positive accounting theory.

Healy (1985) found that companies that provide bonus plans systematically adopt accrual policies to maximize bonuses that will be obtained. The same results are also stated in the research of Suryatiningsih and Siregar (2008), who found that managers in companies that base bonuses on trends in net income, net profit targets, and operating profit targets, tend to do aggressive financial reporting. From these theories and studies, this study expects that the existence of a bonus mechanism in Indonesian companies will encourage aggressive managerial behaviour in the forms of earnings management and other aggressive behaviour in financial reporting. Thus, the first hypothesis in this study is:

***H1 = Bonuses are positively associated with financial reporting aggressiveness***

Cost of debt is a return paid by the company to creditors or debtholder for loan funds provided to the company. This return to the creditor also contains an element of interest to

compensate for the risk of inability to pay from the debtor. The amount of interest that must be paid by the debtor is very dependent on the risk assessment of the debtor's financial performance. The more the company is a risk, the greater the cost of debt to be paid by the company. It is relevant with Risk-Return Trade-off Theory, which states that the higher the risk faced, the more the company will expect a high potential return. Ghosh & Moon (2010) revealed that companies that are at risk due to over-reliance on debt funding would also have a high cost of debt. To reduce the level of cost of debt, companies will be encouraged to report high earnings quality. From these conditions, it can be assumed that companies with a high cost of debt have strong incentives not to manipulate earnings. This is also reinforced by the existence of a creditor monitoring function when the cost of debt is high. This will minimize the actions of financial report manipulation by managers. Thus, the second hypothesis in this study is:

***H<sub>2</sub> = Cost of debt is negatively associated with financial reporting aggressiveness***

Based on the political cost hypothesis, companies that are under political supervision (usually assumed to be large companies) will carry out a series of actions to minimize the political costs they must bear. Company managers tend to report low profits so as not to attract political attention from a range of parties, including the government. One of the political costs that must be borne by public companies against the government is the tax burden. Large companies tend to report lower profits so that the tax burden paid is less than what should be owed. This action is often referred to as tax avoidance measures.

The relationship between tax avoidance and manipulative behaviour in financial reporting was captured by Frank et al. (2009). The study stated that managers do not always consider the trade-off between accounting reporting and taxes. Indeed, the results of the study suggest that there is a significant positive relationship between corporate tax aggressiveness and financial reporting aggressiveness. These result are also relevant to those of Fernandes et al. (2017) and Larastomo, et al. (2016). Thus, this study expects that companies that act aggressively in their taxes will also act manipulatively in their financial reporting. Thus, the third hypothesis in this study is:

***H<sub>3</sub> = Tax avoidance is positively associated with financial reporting aggressiveness***

Agency problems arise due to the differences in interests and asymmetric information between agents and principals. Because of these two things, the principal cannot be fully convinced that the agent will always act in accordance with the principal's or company's wishes. The manager, as the party who has the most access to company information, has an incentive to only report information that can create the best outcome for themselves, even though aggressive actions like this can distort the true performance of the company. For this

reason, companies need to implement a policy or rule to minimize unethical behaviour, not only for managers, but for all parties within the company.

One mechanism that can be used by companies to regulate managers' actions while simultaneously maintaining principal trust, is the implementation of good corporate governance. Corporate governance is created and implemented to harmonize the interests of various parties within the company, such as shareholders, managers, consumers, suppliers, debtors, creditors, the government, and communities. The existence of good corporate governance within the company is expected to prevent opportunistic actions by certain parties, including managers. Various studies have been carried out, such as Jiang et al. (2008), who found that the weaker corporate governance is in the company, the more likely the company is to conduct earnings management. Similar results were also expressed by Lo & Wong (2010), Iqbal & Strong (2010), Muchoki (2013), and Abbadi et al. (2016), the combination of such explained that several aspects of corporate governance have a negative influence on earnings management practices. Based on the objectives of the implementation of corporate governance and previous research, it is suspected that in this study the results will show that corporate governance can reduce aggressive corporate financial reporting. Thus, the fourth hypothesis in this study is:

**H<sub>4</sub> = Corporate governance is negatively associated with financial reporting aggressiveness**

## **Data and Research Model**

### ***Independent Variable***

#### ***Bonus***

Suryatiningsih & Siregar (2008) stated that there are two approaches to bonuses, namely looking at the amount of bonus and seeing the component of bonus calculation. However, because public companies in Indonesia generally do not present data related to the amount of bonuses to management in detail, the bonuses are measured in one of the components of bonus calculation, that is the trend of net income presented in the form of an index. The trend value of net income is the percentage of achievement of net income year t compared to the previous year's net income (t-1). The net income trend is then converted into an index in the range of 0 (zero) to 1 (one). Conversion into an index is needed to accommodate the existence of a minimum (bogey) rule and a maximum limit (cap) in giving bonuses according to Healy (1985). Referring to the research of Suryatiningsih & Siregar (2008), the index value of 0 is given if the trend of net income  $\leq 20\%$ , and the index value of 1 is given if the trend of net income  $\geq 105\%$ . While an index value between 0 to 1 will be given for the trend of net income which is between 21% to 104% through the interpolation method.

### ***Cost of debt***

Cost of debt is the interest rate that must be paid by the company when making loans from external parties. As for this study, the cost of debt variable is calculated by the formula proposed by Pittman and Fortin (2004), that is interest expenses paid by the company in a period divided by the average amount of short-term and long-term debt that produces interest (interest-bearing debt) in that period.

### ***Tax Avoidance***

The tax avoidance variable in this study was measured using Abnormal Book-Tax Differences, which was originally proposed by Tang & Firth (2011). Abnormal Book-Tax Differences are part of Book-Tax Differences, which look at the differences between pre-tax income reported in financial statements and taxable income reported to tax institutions, which arise other than due to differences between generally accepted accounting principles and taxation regulations. To estimate the value of Abnormal Book-Tax Differences, the components of book-tax differences are regressed with non-discretionary items in the form of investment scales in tangible and intangible fixed assets and also economic growth of the company (Rachmawati & Martani, 2014; Mu 'Arofah et al., 2015). The residual value of the model is Abnormal Book-Tax Differences arising from the opportunistic actions of managers through tax avoidance.

$$BTD_{it} = \beta_0 + \beta_1 \Delta INV_{it} + \beta_2 \Delta REV_{it} + \beta_3 \Delta BTD_{it-1} + \varepsilon_{it}$$

$BTD_{it}$  = Book-Tax Differences of company  $i$  in year  $t$ , which is the difference in the value of accounting profits with tax income

$\Delta INV_{it}$  = Changes in investments in tangible and intangible fixed assets from year  $t-1$  to year  $t$ .

$\Delta REV_{it}$  = Change in income company  $i$  from year  $t-1$  to year  $t$ .

$\Delta BTD_{it-1}$  = The  $BTD$  value in year  $t-1$  that is used to calculate the effect of changes in accounting standards and taxation from year to year on  $NBTD$

$\varepsilon_{it}$  = Residual

To control the size of the company, all the variables above are scaled by the average total assets in year  $t$  and year  $t-1$ .

### ***Corporate governance***

The corporate governance variables in this study were adopted from Cheung et al. (2014). The proxy is measured by developing an index consisting of five main measurement dimensions according to the principles of corporate governance issued by the OECD in 1999: naming rights of shareholders, equitable treatment of shareholders, roles of stakeholders, disclosure, and transparency, and the role of the board of directors. The index is made by

elaborating the five main dimensions into several criteria, which are then used as a checklist to give points according to the conditions encountered by each company. The checklist is then calculated and averaged to form values ranging from 0-1.

### ***Dependent Variable***

Financial reporting aggressiveness is measured by the Beneish M-Score model (Beneish, 1999), which is designed to reveal the possibility of companies committing fraud through manipulative actions in reported financial statements. The Beneish M-Score model is calculated by giving a weighted average in eight indicators related to financial ratios. These indicators are:

1) ***Days Sales in Receivables Index (DSRI)***

$$= \frac{\text{Net Receivables}_t / \text{Sales}_t}{\text{Net Receivables}_{t-1} / \text{Sales}_{t-1}}$$

2) ***Growth Margin Index (GMI)***

$$= \frac{(\text{Sales}_{t-1} - \text{COGS}_{t-1}) / \text{Sales}_{t-1}}{(\text{Sales}_t - \text{COGS}_t) / \text{Sales}_t}$$

3) ***Asset Quality Index (AQI)***

$$= \frac{1 - \left[ \frac{\text{Current Asset}_t + \text{Net Fixed Asset}_t}{\text{Total Asset}_t} \right]}{1 - \left[ \frac{\text{Current Asset}_{t-1} + \text{Net Fixed Asset}_{t-1}}{\text{Total Asset}_{t-1}} \right]}$$

4) ***Sales Growth Index (SGI)***

$$= \frac{\text{Sales}_t}{\text{Sales}_{t-1}}$$

5) ***Depreciation Index (DEPI)***

$$= \frac{\text{Depreciation}_{t-1} / (\text{PPE}_{t-1} + \text{Depreciation}_{t-1})}{\text{Depreciation}_t / (\text{PPE}_t + \text{Depreciation}_t)}$$

6) ***Sales, General And Administrative Expenses Index (SGAI)***

$$= \frac{\text{SGA}_t / \text{Sales}_t}{\text{SGA}_{t-1} / \text{Sales}_{t-1}}$$

7) ***Index Leverage (LVGI)***

$$= \frac{(\text{Current Liabilities}_t + \text{Total Long Term Debt}_t) / \text{Total Asset}_t}{(\text{Current Liabilities}_{t-1} + \text{Total Long Term Debt}_{t-1}) / \text{Total Asset}_{t-1}}$$

8) ***Total Accrual to Total Asset (TATA)***

$$= \frac{\text{Income from Operating}_t - \text{Cash Flow from Operating}_t}{\text{Total Asset}}$$

Mathematically, the Beneish M-Score model can be stated in the formula as follows::

$$MSCORE_{it} = -4.84 + 0.920*DSRI + 0.528*GMI + 0.404*AQI + 0.892*SGI + 0.115*DEPI - 0.172*SGAI + 4.679*TATA - 0.327*LVGI$$

Beneish et al. (2013) stated that higher Beneish M-Score values suggest that a company is more aggressive in manipulating financial statements. Also, according to Beneish (1999), this value can also be used as a particular value where the Beneish M-Score value of each company will be compared with benchmarks used to mark which companies should be flagged. The benchmark value is -2.22 (Beneish, 1999), where if the company's M-Score exceeds -2.22, the company is categorized as a company flagged for earnings manipulation. Whereas if the value of M-Score is smaller than -2.22, the company is considered not to manipulate earnings or fraud.

### ***Control Variable***

The control variables used in this study are company size and level of profitability. The use of these control variable is sourced from previous research which explains earnings management variables or financial reporting aggressiveness. The variable size of the company is measured by the natural logarithm (ln) of total assets, following Ali et al. (2015) and Abbadi et al. (2016). These studies stated that firm size has a positive effect on the manager's aggressive behaviour in financial reporting. Meanwhile, the level of profitability in this study was measured using Return on Assets (ROA), as used in the Perols and Lougee (2011). ROA is a ratio that measures the rate of return on net income after tax on total assets. Carlson & Bathala (1997) and Salim & Marietza (2017) found that company profitability has a positive influence on the aggressive actions of managers in financial reporting.

### ***Research Model***

The main model of research is used to examine the effect of bonuses, cost of debt, tax avoidance, and corporate governance on the financial reporting aggressiveness; modelled as follows:

$$MSCORE_{it} = \alpha_{it} + \beta_1 ITNI_{it} + \beta_2 COD_{it} + \beta_3 ABTD_{it} + \beta_4 CG_{it} + \beta_5 SIZE_{it} + \beta_6 ROA_{it} + \varepsilon_{it}$$

$MSCORE_{it}$  = financial reporting aggressiveness of companies i years t

$ITNI_{it}$  = index trend of net income (bonus) in company i year t

$COD_{it}$  = cost of debt in company i year t

$ABTD_{it}$  = tax avoidance of company i year t

$CG_{it}$  = index of corporate governance of company i year t

$SIZE_{it}$  = size of company i year t (control variable)

$ROA_{it}$  = return on assets of company i year t (control variable)

$\varepsilon_{it}$  = error  
 $\alpha_{it}$  = constants

### Sample

The data source used to achieve the object of this research is secondary data obtained from the Indonesia Stock Exchange. The year of observation was carried out from 2013 to 2017. However, because some variables require year t-1 data, the object of research used in this study originated from the financial and annual reports of all companies on the IDX for 2012 to 2017. The data is obtained from the website of the Indonesia Stock Exchange ([web.idx.co.id](http://web.idx.co.id)), The Indonesia Capital Market Institute ([ticmi.co.id](http://ticmi.co.id)), Indonesian Capital Market Directory (ICMD), as well as from other sources considered relevant. The sample was chosen through the use of several criteria, namely excluding companies: that made Initial Public Offerings (IPO) before January 1, 2012, are not engaged in the financial sector and are in sectors that received special treatment in terms of taxation (property, real estate, building construction, aviation, shipping, and oil & gas), which did not suffer losses (pretax negative income) during the observation period, and have elements and/or information in the financial statements as well as complete annual reports for the period 2012-2017. From the sample selection criteria, 52 company samples were obtained. However, this study eliminated 13 companies due to normality problems from outlier data. Therefore, the total companies used in this study is 39. The observation period used is five years; from 2013 to 2017. Thus, the number of observations in this study are 260 observations (firm-year).

### Results

#### Descriptive Statistics

Table 1 shows descriptive statistics for the variables studied, including the mean, median, standard deviation, and maximum and minimum values.

**Table 1:** Descriptive Statistics

	MSCORE	ITNI	COD	ABTD	CG	SIZE	ROA
<b>Mean</b>	-2,017032	0,815864	0,066608	-0,001152	0,557425	28,86784	0,062339
<b>Median</b>	-2,217645	1,000000	0,066667	-0,001507	0,563897	28,80543	0,051529
<b>Maximum</b>	2,073600	1,000000	0,168285	0,066157	0,770894	33,32018	0,209380
<b>Minimum</b>	-3,345517	0,000000	0,000760	-0,128501	0,320000	26,24740	-0,005371
<b>Std. Dev.</b>	0,874233	0,295860	0,037003	0,023496	0,096896	1,624159	0,045157
<b>Observations</b>	195	195	195	195	195	195	195

The financial reporting aggressiveness (MSCORE) has an average value of -2,017. This value is greater than the cut-off of -2.22 set by Beneish (1999) in categorizing manipulator companies. From this, it is seen that the average sample company is indicated to have manipulated their financial statements. Meanwhile, the average level of achievement of the bonus target (ITNI) based on net income in the sample companies is 81.6%. The average value of the cost of debt (COD) provides information that the rate of return requested by creditors for the funds lent is 6.67%. Meanwhile, the average abnormal book-tax differences (ABTD) value is negative and close to zero so that on average, the companies observed do not carry out tax avoidance. Based on these statistics, sample companies have implemented more than 55% of guidelines related to corporate governance.

A multicollinearity test is conducted to test whether there is a correlation between independent variables. The use of two or more independent variables can cause multicollinearity. Table 2 is a correlation matrix which shows that there is no correlation between research variables. Thus, it can be concluded that this study is free from the problem of multicollinearity.

**Table 2:** Correlation Table

	<b>ITNI</b>	<b>COD</b>	<b>ABTD</b>	<b>CG</b>	<b>SIZE</b>	<b>ROA</b>
<b>ITNI</b>	1.000000	-0.244116	0.163907	0.038688	0.022243	0.387312
<b>COD</b>	-0.244116	1.000000	-0.112254	-0.051122	-0.163772	-0.319523
<b>ABTD</b>	0.163907	-0.112254	1.000000	-0.019152	-0.070400	0.292898
<b>CG</b>	0.038688	-0.051122	-0.019152	1.000000	0.372573	0.107788
<b>SIZE</b>	0.022243	-0.163772	-0.070400	0.372573	1.000000	0.014042
<b>ROA</b>	0.387312	-0.319523	0.292898	0.107788	0.014042	1.000000

### ***Regression Results***

The regression results in Table 3 show the influence of the four variables studied, namely bonus (ITNI), cost of debt (COD), tax avoidance (ABTD), and corporate governance (CG) on the financial reporting aggressiveness (MSCORE). Based on the results of statistical testing, it can be seen that all variables have a significant effect. However, the ITNI variable has a different direction, so it is concluded that the bonus does not affect financial reporting aggressiveness. Meanwhile, the cost of debt and corporate governance variables both have a negative influence on financial reporting aggressiveness. Finally, the positive coefficient of the tax avoidance variable indicates that companies that carry out tax avoidance will also act aggressively in their financial reporting.

**Table 3:** Regression test results of the research model

Variable	Prediction	Coefficient	t-Statistic	Prob.
ITNI	+	-0.351897	-3.428537	0,00040
COD	-	-4.222807	-2.641165	0,00455
ABTD	+	2.871490	2.063463	0,02040
CG	-	-1.328499	-2.546111	0,00595
SIZE	+	0.773610	4.174170	0,00005
ROA	+	4.255475	4.027670	0,00005
C	N/A	-23.30254	-4.498543	0,00000
<i>R-Squared</i>	0.517374			
<i>Adjusted R-Squared</i>	0.375804			
<i>F-Statistic</i>	3.654536			
<i>Prob(F-Statistic)</i>	0.000000			

### ***Analysis and Discussion***

#### ***Effect of bonuses on the financial reporting aggressiveness***

From the tests conducted, the hypothesis that the bonus is positively associated with financial reporting aggressiveness is rejected. The result of this study suggests that although company management has the potential to obtain additional bonuses along with the high achievement of profits, it does not affect management decisions to manipulate earnings or the overall financial statements. In other words, bonuses are not always the main motive for managers to act aggressively in financial reporting. This result is in line with Ferdiansyah (2014).

The result of this study is not in line with Suryatiningsih & Siregar (2008) and Utomo (2011), both of which provided that the existence of bonuses based on profit are positively associated with corporate earnings manipulation. The difference may be due to the use of proxies in measuring bonuses as this study adopts the research of Suryatiningsih & Siregar (2008), which employs the object of research in the form of State-Owned Enterprises (BUMN). This also indicates that the bogey rules and stamps in the mechanism of bonuses of state-owned companies cannot be equated with non-financial companies in Indonesia. This is very reasonable considering that until now there have been no formal regulations governing the provision of bonuses to companies in Indonesia. In Indonesia Act Number 13 of 2003 concerning manpower and its implementing regulations, there are no provisions regarding bonuses for company management or employees. Thus, bonuses are not the company's obligation, but are only part of the reward and punishment policy. Therefore, the policy of giving bonuses is under the authority of each company, and it cannot be ascertained whether there is uniformity among all sample companies as to what they base their bonuses on. Rommalla (2018) stated that generally, annual bonuses of Indonesian companies are provided

as a form of appreciation for the performance of their employees during a year and they are calculated based on salary, years of service, position, department, and warning letters. Therefore, there are many factors that are used as references by companies in giving bonuses, and they are not solely based on the achievement of company profits.

### ***Effect of the cost of debt on the financial reporting aggressiveness***

From the result of this study, the cost of debt is negatively associated with financial reporting aggressiveness. The companies that have a high cost of debt tend not to take aggressive actions in the form of financial report manipulation. Indonesian companies who might have a high cost of debt (have a higher risk), will receive tighter supervision from creditors. The external monitoring function of banks and other creditors can minimize the tendency of companies to act aggressively through the manipulation of financial statements.

This phenomenon is relevant to Bhambhwani (2017), who found that companies that are supervised by creditors, especially banks, have a reduced level of manipulation and an improved quality of financial reporting. The manager will be bound by a promise to pay cash flows in the future due to debt funding accompanied by interest payments. To ensure the smooth payment of interest and principal repayments, the creditor will establish various policies in the form of debt covenants as a monitoring mechanism for debtors. This policy is generally carried out in the form of limits or thresholds at various financial ratios. The limit in the debt agreement functions are a signal or an early warning of the existence of a problem in the borrowing company's finances (Janes, 2003). That condition will minimize the movement of managers to manipulate the items in their financial statements. Companies that violate debt covenants have the potential to be subject to penalties that harm the company. These penalties can include: accelerated debt maturity, renegotiation of debt periods, and even increases in interest rates (Beneish and Press, 1995) in Fargher et al. (2001). Therefore, financial statement aggressiveness that have been successfully captured by creditors, as a result of violating the debt covenants, have the potential to increase the level of cost of debt currently borne by the company. Companies that have a high cost of debt due to the high risk of default will tend to act conservatively by not manipulating financial statements because their movements are monitored by creditors. Companies that are prudent and conservative obtain a higher credit rating, and this leads to the reducing level of return requested by creditors (Chen & Zhu, 2013).

### ***Effect of tax avoidance on the financial reporting aggressiveness***

From the results of this study, tax avoidance is positively associated with financial reporting aggressiveness. This positive influence also suggests that companies can do tax avoidance alongside financial report manipulation and earnings management. So, the theory which

states that there is a trade-off between earnings according to accounting and fiscal profit, is not approved in this study. Companies can still avoid taxes by reporting low fiscal profits along with reporting high accounting profits. This is done by utilizing the gray area that occurs due to differences between tax provisions and accounting standards. The results of this study are in line with Frank et al. (2009) and Fernandes et al. (2017).

The result of this study is also in line with Kamila & Martani (2014). Although there are differences in proxies, that study also stated that tax avoidance has a positive effect on earnings management actions. The proxies used in that study were the permanent differences, originated by Desai and Dharmapala (2006), as a measure of tax avoidance and the Jones model (1991), as a measure of earnings management. Differences also occur in the object of research as Kamila & Martani (2014) only use companies in the manufacturing sector as a sample. However, this does not rule out the possibility of similarity in results, because the manufacturing sector is the most dominant sector in Indonesia. Most of the non-financial companies used in this study are companies from the manufacturing sector.

### ***The effect of corporate governance on the financial reporting aggressiveness***

From the results of this study, corporate governance is negatively associated with financial reporting aggressiveness. This result proves that in this model, corporate governance is able to reduce management opportunist behaviour in manipulating financial statements. The result of this study are in line with Abadi et al. (2016). As for the research, the proxy for the quality of corporate governance is measured using an index that describes corporate governance as a whole, not just one or only several mechanisms. Whereas other previous studies often described corporate governance through one or several mechanisms, such as managerial ownership and institutional ownership (Arizona, Mahaputra, & Anggreni, 2017) or board of commissioners, independent commissioners, managerial ownership, and audit committees (Larastomo et al., 2016). The results of each component or mechanism are diverse, so it is suspected that they are not able to describe the true meaning of corporate governance. Allegedly, the similarity in the types of proxies using this index are a result of the similarity factor between the research of Abadi, Hijazi, & Al-Rahahleh (2016) and this study.

Meanwhile, there were not many previous studies in Indonesia that used the index to measuring corporate governance. The closest research was conducted by Yanuar and Restuti (2015). That research used a corporate governance index proxy, developed by the Indonesian Institute for Corporate Governance (IICG), to rank the implementation of good corporate governance (GCG) in Indonesian companies. The index score represents eleven aspects of GCG implementation such as transparency, accountability, and ethics. However, the results

of that study are not significant and they provided that corporate governance does not affect earnings management.

An index developed from OECD guidelines is better able to capture corporate governance in a true sense. That is, this index can more comprehensively describe the framework of good corporate governance by current best practices as compared to other measurements. This becomes rational because the OECD guidelines are currently used as international benchmarks and are considered as a leading instrument in policy making in the area of corporate governance (Organization for Economic Co-Operation and Development, 2015). Rules in Indonesia—SE OJK Number 32 / SEOJK.04 / 2015 concerning Guidelines for Corporate Governance, state that these rules are compiled with regards to good corporate governance by international practices that should be emulated. Thus, it is important for companies to be able to implement corporate governance in the real sense because it is proven that corporate governance can function as a monitoring and controlling tool for companies, especially in reducing aggressive managerial actions in the preparation of financial statements.

### ***Robustness Check***

In this study, a robustness check is conducted by replacing the dependent variable of financial reporting aggressiveness in the main research model. Many previous studies used the term financial reporting aggressiveness to describe earnings management practices that were proxied by discretionary accruals (Frank et al., 2009; Kamila & Martani 2014; Hanna & Haryanto, 2016; and Fernandes et al., 2017). For that reason, in addition to the main regression model, this study also examines another regression model to test the effect of bonuses, cost of debt, tax avoidance, and corporate governance on earnings management. Earnings management variables are measured using discretionary accrual proxies developed by Kothari et al. (2005). The models are measured as follows:

$$\frac{TACC_{it}}{TA_{it-1}} = \beta_1 \left( \frac{1}{TA_{it-1}} \right) + \beta_2 \left( \frac{\Delta REV_{it}}{TA_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{TA_{it-1}} \right) + \beta_4 (ROA_{it-1}) + \varepsilon$$

$TACC_{it}$  : Total accruals of company  $i$  in year  $t$ . Measured from company net income  $t$  in period  $t$  ( $NI_{it}$ ) which is reduced by cash flow from operation of company  $i$  in period  $t$  ( $CFO_{it}$ )

$TA_{it-1}$  : Total assets of company  $i$  at the end of the year  $t$

$\Delta REV_{it}$  : Changes in profits of company  $i$  in year  $t$  with year  $t-1$

$PPE_{it}$  : Property, plant and equipment company at the end of the year  $t$

$ROA_{it-1}$  : Return on Assets of company  $i$  at the end of year  $t-$

$\varepsilon$  : Error

The value of the earnings management variable is obtained from the residual value of the regression model above. This residual value reflects discretionary accrual which is an accrual component derived from discretion or engineering by the manager.

By using the Fixed Effect Model, the results of the panel data regression test for a robustness check are shown in Table 4. From the table, it can be seen that the bonus (ITNI) and the cost of debt (COD) are not associated with earnings management variables. Meanwhile, tax avoidance is positively associated with financial reporting aggressiveness, and corporate governance is negatively associated with financial reporting aggressiveness. These results are slightly different from the main research regression model that measures the financial reporting aggressiveness with the Beneish M-Score, especially in the cost of debt (COD) variable.

**Table 4:** Robustness check panel data regression test results

Variable	Prediction	Coefficient	t-Statistic	Prob.
ITNI	+	-0.001172	-0.104033	0,4587
COD	-	-0.131796	-0.954462	0,1707
ABTD	+	0.433389	3.370314	0,0005
CG	-	-0.145480	-2.929035	0,0020
SIZE	+	0.098871	5.190130	0,0000
ROA	+	0.460989	3.596669	0,0002
C	N/A	-2.788738	-5.186377	0,0000
<i>R-Squared</i>	0.622897			
<i>Adjusted R-Squared</i>	0.512280			
<i>F-Statistic</i>	5.631114			
<i>Prob(F-Statistic)</i>	0.000000			

The difference in results for the cost of debt variable allegedly arise because monitoring by creditors is negatively associated with financial reporting aggressiveness, but not for earnings management by managers. According to the Corporate Finance Institute (2019), in addition to the establishment of a threshold in the financial ratios of financial statements, generally, debt covenants submitted by creditors also contain the rule that the debtor company must be able to ensure that its' accounting practices are in accordance with generally accepted accounting standards. In other words, the creditor's focus is only on conformity with generally accepted accounting standards or principles. The Indonesia GAAP - PSAK - provides flexibility for management to use judgment in choosing accounting policies. This condition motivates management to act opportunistically by conducting earnings management. Thus, it is very rational if the creditor monitoring is tight due to the high cost of debt only able to detect aggressive actions of financial reporting carried out by violating the GAAP. These results

confirm the statement expressed by Perols & Lougee (2011), that although financial reporting aggressiveness and earnings management have the same objective, earnings management is conducted legally because it does not violate the GAAP. Aggressive behavior in financial reporting is very close to fraudulent behavior because it is conducted by ignoring compliance with applicable rules or standards. Patelli & Pedrini (2013) stated that one of the characteristics of financial reporting aggressiveness is the emergence of consequences in the form of litigation.

## **Conclusions**

Based on the hypothesis examination, this study finds that bonuses based on the achievement of profit are not associated with financial reporting aggressiveness. Bonuses are not always the main motives for managers to act aggressively in financial reporting. Meanwhile, the cost of debt is negatively associated with financial reporting aggressiveness. These results indicate that companies that have a large cost of debt tend not to manipulate financial statements. This is probably due to the external monitoring function of the creditor. Companies with high levels of cost of debt (due to the high risk of violating debt covenants) will be monitored more closely by creditors and subsequently management will be more prudent and disciplined in reporting their financial statements.

This study also identified that tax avoidance is positively associated with financial reporting aggressiveness. This positive influence illustrates that tax avoidance can be carried out simultaneously with the actions of financial report manipulation and earnings management. This also breaks the old theory that states that companies will face trade-offs in reporting profits. Meanwhile, corporate governance is negatively associated with financial reporting aggressiveness. Corporate governance, which is proxied by an index based on the OECD guidelines, can describe corporate governance with a 'true' meaning so that it can reduce opportunistic and manipulative behaviour by company management.

This study still has various limitations. This study employs a small sample, a proxy of the cost of debt that has not separated interest loans, and the basis of the corporate governance index does not use the most recent OECD Principle (still using the principle of 1999 instead of 2015). For this reason, in addition to expanding the research objects and time intervals, future research is expected to provide additional insight by overcoming these limitations and use other proxies, such as the use of exact bonus amounts that are given to directors/managers so as to accurately describe the bonus variable. In addition, to represent financial reporting aggressiveness, further research can use different proxies that are more up-to-date, such as the Fraud Score Model (F-Score) developed by Dechow et al. (2011).



Meanwhile, in order to establish more real benefits from future research, it is expected that various parties can participate in implementing supporting policies. For example, regulators need to issue policies related to disclosure of bonus amounts in annual reports so that more appropriate bonus variables can be developed. While for investors, it is necessary to pay attention to the level of good corporate governance applied by the investee, not just looking at the financial performance of the company. Lastly, the company itself is expected to apply a good corporate governance culture in accordance with the generally accepted guidelines and also to disseminate to all parties related to the company, that good corporate governance is a necessity, not just an obligation.

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