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Factors that Influencing Creative Accounting Practices at Manufacturing Company That Listed on Indonesia Stock Exchange

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Abstract
There is a loophole in regulation and policies. The act of optimizing the loophole in accounting regulation and policies is called as creative accounting. Therefore, this research aims to investigate whether the bonus compensation, leverage, and profitability are factors that influencing creative accounting. The population taken as objects of observation are 162 manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2017-2019. Sample selection is done by using the purposive sampling method. This research obtained a sample of 32 manufacturing companies listed on Indonesia Stock Exchange. This research uses three periods, so there are 96 sample data. This research is used panel data regression with EViews program. The results showed that the higher bonus compensation is followed by higher creative accounting. The higher leverage is followed by higher creative accounting. The higher profitability is followed by the higher creative accounting.

Keyword*: Bonus Compensation, Leverage, Profitability, Creative Accounting*

Abstrak
Terdapat celah pada regulasi. Kegiatan pemanfaatan celah pada regulasi dan kebijakan akuntansi disebut *creative accounting*. Maka, penelitian ini bertujuan untuk menginvestigasi apakah kompensasi bonus, leverage, dan profitabilitas merupakan faktor yang dapat memengaruhi *creative accounting*. Populasi yang digunakan sebagai objek dari penelitian yaitu 162 perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia pada 2017-2019. Penentuan sampel dilakukan dengan menggunakan metode purposive sampling. Selanjutnya, diperoleh sampel sebanyak 32 perusahaan manufaktur. Penelitian ini menggunakan 3 periode observasi, maka diperoleh 96 data sampel. Penelitian ini menggunakan regresi data panel dengan program EViews. Hasil penelitian menunjukkan bahwa semakin tinggi kompensasi bonus diikuti dengan semakin tinggi *creative accounting*. Semakin tinggi leverage diikuti dengan semakin tinggi *creative accounting.* Semakin tinggi profitabilitas diikuti dengan semakin tinggi *creative accounting.*

Kata kunci*: Kompensasi Bonus, Leverage, Profitability, Creative Accounting*

INTRODUCTION

Creative accounting is something done by business entities to utilize accounting techniques and regulations to obtain desired results, such as presenting higher or lower profit and assets depending on the objectives to be achieved (Sulistiawan *et al*., 2011). Etymologically, creative accounting consists of two words, creative and accounting. Referring to Indonesia Dictionary (KBBI) creative means having creativity, having the ability to create, and is (containing) creativity: work that requires intelligence and imagination, while accounting is a theory and practice of account, including responsibilities, principles, standards, prevalence (custom), and all its activities; matters relating to accountants; the art of recording and summarizing financial transactions and interpreting the effects of a transaction on an economic entity. So, it can be concluded that creative accounting is creativity in accounting when accountants use their creativity in accounting methods in making financial statements. Agreeing with Myddelton (2009), accountants who are considered creative are accountants that can interpret the grey area of accounting.

There are five groups in financial number games described by Mulford and Comiskey (2002). It consists of aggressive accounting, earnings managements, income smoothing, fraudulent financial reporting, and creative accounting practices. First, aggressive accounting is the choice and application of accounting policies and accounting principles that are intentionally done to achieve desired results.

Second, earnings management is defined as revenue manipulation to achieve the targets set by management by making income more consistent, smoother, and sustainable.

Furthermore, income smoothing is explained as one of earnings management that is done to prevent recording too high or too low income by reducing and saving the profits obtained in profitable period to be used in low profit period, so it looks stable. Meanwhile, fraudulent financial reporting described as mistaken or failure in presenting and disclosing the amount in financial reporting that is done to deceive the users of financial statements. Moreover, creative accounting interpreted as any or all steps used in financial numbers games including aggressive choice and application of accounting principles, fraudulent financial reporting, and any steps taken toward earnings management or income smoothing.

Mulford and Comiskey (2002) also classify creative accounting into five types, there are recognizing premature or fictitious revenue, aggressive capitalization and extended amortization policies, misreported assets and liabilities, getting creative with the Income statement, and problems with cash-flow reporting. Recognizing premature or fictitious revenue is income recognition prior to the time of revenue recognition as specified in the accounting standard or recognition of earning before it is supposed to be recognized appropriately with accounting standards. Fictitious revenue includes recording revenue for sales that do not exist. Aggressive capitalization and extended amortization explained that the company can increase profits by minimizing expenses and capitalizing expenses aggressively that should have been issued or by amortizing the capitalized amount over an extended period.

Furthermore, there are also misreported assets and liabilities. It is done by the company to value a higher asset and assess a lower liability. Getting creative with the income statement is the company communicate a different level of earning power using the format of income statement. Then, the problems with cash-flow reporting explained that the company can inform good income other than by reporting high income and also report higher and sustainable cash flows, for example classifying operational expenses as investment activities or financing investment or funding flows can be classified as an operation.

Creative accounting is not something new, creative accounting practices have been done globally all around the world. Creative accounting term was often used in 2002, because at that time there was an accounting scandal. As an example, several cases from collapsed companies such as Xerox, Worldcom, Global Crossing, and the case of Enron in 2001. Not only happens abroad, but the term of creative accounting has also happened in Indonesia. As reported in Kompasiana.com, in 2001 there was a case of creative accounting conducted by PT Kimia Farma. The management of PT Kimia Farma reported a net profit of Rp132 billion, after a re-audit in 2002 PT Kimia Farma's financial statements were restated because it was suspected of marking up net income in the 2001 financial statements when in fact PT Kimia Farma only had a profit of Rp 99 billion. As a result of this, PT Kimia Farma had to restate with an excuse that there was an error in recording (bisnis.tempo.co).

Furthermore, PT Ades Alfindo presented the 2001-2004 financial statements higher than it was supposed to be reported. The new management of PT Ades Alfindo found inconsistencies in recording sales made by the previous management. PT Ades Alfindo reported higher sales of 0,6–3,9 gallons compared to the amount of production.PT Ades Alfindo’s new management has just reported that the 2001 real sales figure is estimated to be lower by Rp 13 billion than reported. In 2002, the difference reached Rp. 45 billion, while for 2003 it was Rp 55 billion. For the first six months of 2004, the difference was approximately Rp. 2 billion. This failure is not detected because PT Ades Alfindo did not include sales volumes in the audited financial statements. As a result, PT Ades Alfindo overstated the financial report from 2001-2004 (Sulistiawan *et al*., 2011).

Another case is PT Garuda, which was initially reported to be at loss become profit. Two commissioners of PT Garuda refused to sign Garuda's 2018 financial report during the Annual General Meeting of Shareholders (AGMS). The rejection occurred because there is an agreement to provide connectivity in-flight services, between PT Mahata Aero Teknologi and Garuda Indonesia Group on

October 31, 2018, the partnership contract between Garuda and Mahata worth US $ 239.94 million valid for the next 15 years, but has been recorded in the first year, and classified into other income.

Recognition of income from the partnership with PT Mahata Aero is contrary to Financial Accounting Standards Guidelines No. 23 about revenue, especially paragraphs 28 and 29. In PSAK No. 23 it is explained that the income arising from the use of company assets by other parties that generate interest, royalties, and dividends can be recognized if it is probable that the company will receive income. Transactions from the partnership with PT Mahata Aero significantly determine Garuda's avoidance of losses in the 2018 period. Garuda received revenues of US $ 239.94 million from Mahata in 2018 and made Garuda (the group) book a net profit of US $ 5.02 million. If there is no partnership, the airline can certainly record a loss of US $ 244 million (www.tirto.id, 2019).

Creative accounting practices can occur because of some motivation. One theory that explains the motivation for doing creative accounting is positive accounting theory. This theory was developed by Watt and Zimmerman in 1978. Positive accounting theory consists of three hypotheses, there are the bonus plan hypothesis, debt covenants hypothesis, and political cost hypothesis. This research uses bonus compensation, leverage, and profitability as the proxy of positive accounting theory.

Several reasons encourage the practice of creative accountin*g*, one of the reasons is bonus compensation. Usually, the company has a plan of giving bonus compensation to employees or key employees that can be expressed in bonus that affiliated with the company’s income (Lestari *et al*., 2019). In the bonus plan hypothesis, management can choose policies that can increase their bonuses (Watts and Zimmerman, 1990). In this research, bonus compensation is used as an independent variable and the proxy of the bonus plan hypothesis in positive accounting theory.

Debt covenants hypothesis is explained as a condition where the company has the possibility to violate the debt agreement. The company's management will tend to choose accounting procedures through the change in reported earnings from future periods to the present period. Leverage is used in this research as an independent variable and the proxy of debt covenants hypothesis in positive accounting theory.

Political costs mean costs that must be paid by the company related to political actions such as taxes, regulations, government subsidies, *etc* (Sarwinda and Mayar, 2015). The political cost hypothesis is an action that aims to reveal lower corporate profits using an accounting process. This research uses profitability as the proxy for the political cost hypothesis in positive accounting theory. Because the profits generated by the company are high, and cause high political costs. This can motivate companies to do creative accounting to avoid regulatory costs and avoid the possibility of higher taxes.

Many empirical researchs on creative accounting has been done. These include Sangadah and Kusmuriyanto (2014), Elfira (2014), Dustriyani and Muhammad (2015), Mayangsari (2015), Wibisana and Dewi (2015), Irianto *et al*., (2017), Alexander and Hengky (2017), Nurliyasari and Saifudin (2017), Pratiwi *et al*., (2018), Ayem and Agus (2018), Prihastomo and Muhammad (2018), Lengkong and Vinola (2019). Research from Dustriyani and Muhammad (2015), states that bonus compensation has no effect on creative accounting in kind of earnings management. Otherwise, research from Elfira (2014), Mayangsari (2015), Prihastomo and Muhammad (2018) have shown that bonus compensation influences creative accounting practices in the kind of tax avoidance. Pratiwi *et al.*, (2018) states that bonus compensation influences creative accounting in the type of earnings management.

Some other research conducted by Sangadah and Kusmuriyanto (2014), Ayem and Agus (2018) stated that leverage does not influences creative accounting in kind of the choice of accounting inventory methods. Also, Alexander and Hengky (2017), and Lengkong and Vinola (2019) show the results that leverage does not affect creative accounting practices in the type of earnings management. But on the contrary, research from Nurliyasari and Saifudin (2017) has shown that leverage influences creative accounting practices in the type of income smoothing.

In addition, research conducted by Irianto *et al*., (2017) resulted that profitability has a positive influence on creative accounting in kind of tax avoidance. Alexander and Hengky (2017) regarding the effect of profitability on management practices found that profitability influences creative accounting in the type of earnings management. Furthermore, the research of Wibisana and Dewi (2015), and

Lengkong and Vinola (2019) states that profitability influences creative accounting in the kind of earnings management, while research from Nurliyasari and Saifudin (2017) states profitability does not affect creative accounting in the kind of income smoothing. The conflicting results between previous research become the reason for researchers to re-examine the effect of bonus compensation, leverage, and profitability on the practice of creative accounting. Many phenomena of creative accounting practices that occur and only a few people are aware of these practices is also a reason for researching on creative accounting and why it happens.

This research uses a manufacturing company that is listed on the Indonesia Stock Exchange as a sample. Also, the recent financial statement's period from 2017-2019 is used. Furthermore, diverse with previous research that measured bonus compensation using dummy variable and executive share ownership, this research will measure bonus compensation by the average amount of the keynote management's bonus compensation. Moreover, unlike the previous research that measures creative accounting using the Modified Jones Model, accrual working capital, and Index Eckel. This research will measure creative accounting by comparing the change in operating cash flow to change in net income.

LITERATURE REVIEW

Positive Accounting Theory

Positive accounting theory (PAT) is a theory that was developed by Ross L Watts and Jerold R Zimmerman in 1978, 1979, 1986 and 1990. Watts and Zimmerman in developing a positive accounting theory published two journals in The Accounting Review (1978 and 1979). Then, in 1986 Watts and Zimmerman published a book. Positive accounting theory becomes one of the grand theories in accounting. Positive accounting theory used to provide explanations and predictions for accounting practices (Watts and Zimmerman,1990). Positive accounting theory is a further research of normative accounting theory that is considered a failure in explaining the phenomenon of practice that occurs in real life.

The change from a normative approach to a positive approach in accounting research is due to several things, there are the inability of the normative approach to empirically test the theories, the normative approach is more focused on investors, and the normative approach does not allow the allocation of capital in the stock market (Magdalena, 2018). Watts and Zimmerman in their journal in 1990 explained three hypotheses of positive accounting theory, there are the bonus plan hypothesis. This hypothesis shows that managers in companies with bonus plans, tend to choose accounting methods that can increase revenue in the current period to increase their bonuses. The debt covenants hypothesis. This hypothesis shows that in *ceteris paribus* situation, the closer the company to violation of a debt agreement, the company will have a tendency to choose accounting procedures by shifting future earnings to the current period. The hypothesis of political costs. This hypothesis shows that companies with high profitability will tend to shift their income from this period to the next periods to avoid or reduce political costs.

Creative Accounting

According to Lee *et al*., (2013), creative accounting terms might have originated in 1968 on a movie by Mel Brooks titled The Producers. This also in line with Baofu (2014) that stated the original usage of the term creative accounting is in The Producers movie by Mel Brooks 1968. The accountant in the movie tells the broadway producer, "Under the right circumstances, a producer could make more money with a flop than he could with a hit… if he was certain that the show would fail, a man could make a fortune… it's simply a matter of creative accounting" (Cryer, 2010). There is a difference between ordinary accounting and creative accounting. Here are some definitions of creative accounting:

1. Scott (1999) in Usmar (2014) give an explanation about creative accounting, that is: "Creative accounting means the process of manipulation of numbers in accounting by taking advantage of gaps in accounting and selection rules and disclosure practices to change financial statements

from what it supposed to be, processed and reported on a transaction basis to produce the necessary accounting results rather than reporting transactions neutrally and consistent".

2. "Creative Accounting can be defined as the deviation from the traditional methods used to interpret an accounting rule or standard. The rationality and objectivity of accounting is based on the level of rationality and objectivity of the people who interpret the rules", (Stanwick and Sarah, 2014).
3. Gosh (2010) in Kamau *et al.*, (2015) explaining creative accounting as "Creative accounting is described as modifying accounting numbers according to the wishes of managers and directors of the organization by exploiting the existing regulatory loopholes and ignoring some of them. Creative accounting involves practices that are openly exhibited such as window dressing and such as financing outside the balance sheet".

Mulford and Comiskey (2002) considering numbers of games in the financial field as creative accounting, and game prizes as motivation or goals desired by people who did creative accounting. Expected rewards from games obtained by those who play the game, or those who do creative accounting are higher share price, reduce share price volatility, increased value of stock option, incentives, reduced political costs and reduced barriers to debt agreements. According to Mulford and Comiskey (2002), creative accounting practices can be classified into five types, there are recognizing premature or fictitious revenue, aggressive capitalization and extended amortization policies, misreported assets and liabilities, getting creative with the income statement, problems with cash flow reporting.

Bonus Compensation

Bonus compensation is a reward or feedback received by employees for contributions made to the company. Bonus compensation also means something related to financial rewards received by someone due to the work relationship with an organization (Utami,2020). The purpose of giving bonus compensation are to appreciate the employee's achievement, ensuring fairness of employee's salary, reducing employee turnover, getting high quality employee, controlling cost, and following regulation. Bonus compensation may be given in the kind of wages or salaries, incentive, allowance, and facilities.

Leverage

As stated by Ehrhardt and Brigham (2011) leverage has a meaning of the amount to which a firm uses debt financing. It also known as financial leverage. Financial leverage consists of three implications, there are through increasing funds using debt, the stockholders can continue controlling the company without adding the amount of their investment. If the company collects more on investment financed with borrowed funds instead of pays in interest, then the return to shareholders will be increased, but on the other hand, the risk also increased. The creditor views equity to look at a margin of safety, the higher portion of funds given by stockholders, the less risk creditors will face.

Financial leverage has three ratios, the following ratios are the debt ratio, is the ratio of total liabilities to total assets. It measures the percentage of funds provided by current liabilities and long-term debt. The debt to equity ratio, is the ratio of total liabilities to total assets decreased by total liability. Market debt ratio, is the ratio of total liabilities to total liabilities added by the market value of equity. It is used to estimate the market value of liabilities. This research is use debt ratio to measuring leverage.

Profitability

Profitability is the final result of several policies and decisions (Ehrhardt and Brigham,2011). The profitability ratio shows the combined effects of liquidity, asset management, and debt on operating results. This research will use return on assets (ROA) ratio as the proxy of profitability. It because, ROA indirectly reflects the performance of managements in generating profits by using all the available resources.

Hypothesis Development

H_1: The higher bonus compensation is followed by the higher creative accounting.
H_2: The higher leverage is followed by the higher creative accounting.
H_3: The higher profitability is followed by the higher creative accounting.

RESEARCH METHODS

Research Design

The type of research is a causal associative research with quantitative approach. This research uses secondary data with the object of this research is manufacturing company's annual report. The population in this study are 162 manufacturing companies listed on the Indonesia Stock Exchange in 2017-2019. The sample of this study is 32 manufacturing companies using purposive sampling. The data analysis technique is panel data regression analysis using EViews.

Conceptual and Operational Definition of Variables

Variable Independent

Bonus Compensation

The bonus compensation variable is measured using the average of key management's bonus compensation.

$$Bonus\ Compensation = \frac{Total\ of\ Key\ Managemen\ Bonus}{Total\ of\ Directors\ and\ Commisioners}$$

Leverage

Leverage is measured by comparing the total debt to assets. The leverage variable calculated with the formula:

$$leverage = \frac{\text{Total debt}}{\text{Total Asset}}$$

Profitbility

Profitability is proxied by using ROA (Return On Asset). The profitability that proxied by ROA is calculated with the formula:

$$Return\ on\ Asset = \frac{\text{Net Income}}{\text{Total Asset}}$$

Variable Dependent

Creative Accounting

According to Mwakalobo (2010), creative accounting can be measured by comparing the cash flow to net income. The cash flow statement consists of three parts, operating, investing, and financing. Operating cash flow reflects the company's operational performance based on cash receipts or disbursements. While for investing and financing cash flows, high or low amounts do not indicate the good or bad of the company's performance (Sulistiawan *et al.*, 2011). Thus, the change in operating cash flow will be compared with changes in net income.

The increase of earnings can be obtained through creative accounting practices, but will not generate operating cash flow (Mulford and Comiskey, 2002). If the cash flow from operating decreases but the net income increases, this can indicate profit growth caused by non-operating activities such as asset sales or changes in accounting policies (Suprajadi, 2005). Also, if there is an increase in net income but a decrease in cash flow, then this can be an indicator that there is a creative accounting practice (Mwakalobo, 2010). Therefore, in this research, the researcher used a comparison of the change in cash flow from operating and net income from 2017-2019. Hence, the formula for measuring creative accounting is as follows:

The ETR calculation formula is as follows:

$$Creative\ Accounting = \frac{Operating\ Cash\ Flow_t - Operating\ Cash\ Flow_{t-1}}{Net\ Income_t - Net\ Income_{t-1}}$$

RESULT AND DISCUSSION

Research Overview

This study uses secondary data obtained from the Indonesia Stock Exchange (IDX). The population data of this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2017-2019, and based on data obtained through purposive sampling and eliminating outliers, there are 96 panel data of manufacturing companies available. In determining the sample used, there are several criteria that can be seen in Table 1.

Table. 1 Sample Selection with Purposing Sampling

No	Criteria	Total
1	Manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2017-2019	162
2	Manufacturing companies that incompletely publish annual financial report	(30)
3	Manufacturing companies that are not using rupiah currency	(24)
4	Manufacturing companies experiencing a loss	(27)
5	Unavailable data regarding bonus compensation	(29)
6	Outlier data	(20)
	The number of companies use as research sample	32
	The number of research sample for 3 years	**32**

Source: Secondary data 2020

Result Discussion

Descriptive Statistic Analysis

Descriptive statistical analysis is use to knowing the distribution of the data of each variable used in this study. The variables are bonus compensation, leverage, profitability, and creative accounting. The descriptive statistical analysis test results can be seen in Table 2.

Table 2. Result of Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Bonus_Compensation	96	17,90520	22,89790	21,03627	0,998549
Leverage	96	0,100000	0,650000	0,382813	0,148698
Profitability	96	0,0100000	0,180000	0,062708	0.036404
Creative_Accounting	96	0,077000	4,322100	1,754548	1,068367

Source: Secondary data 2020

a. Bonus Compensation

The variable of bonus compensation having a minimum value of 17,90520 and a maximum value of 22,89790. Bonus compensation variable has average value of 21,03627 and standard deviation value of 0,998549. The average value obtained by bonus compensation variable shows that the bonus compensation given to the key management is relatively high.

b. Leverage

Leverage variable have a minimum value of 0,100000 and a maximum value of 0,650000. Leverage variable has average value of 0, 382813 and standard deviation of 0,148698. The average value obtained by the leverage variable shows that the manufacturing companies used as a research sample has a high level of leverage.

c. Profitability

The profitability variable has a minimum value of 0,0100000 and a maximum value of 0,180000. The profitability variable has average value of 0,062708 and standard deviation of 0.036404. The average value shows that the manufacturing companies used in this sample are generate a low profitability.

d. Creative Accounting

The creative accounting variable has a minimum value of 0,077000 and a maximum value of 4,322100. The creative accounting variable has average value of 1,754548 and standard deviation of 1,068367. The average value shows that the creative accounting conducted in a low number.

Classic Assumption Test

Normality Test

The result of the normality test can be seen in figure 1. The Jarque-Bera value is 3616,562 > 2. With the probability 0,000000 < α 0,05. So, it can be concluded that the data is not not normally distributed. Thus, the researcher transformed the data into Ln + 1. The result of the transformed data can be seen in figure 2. After the transformation, the Jarque-Bera value is 1,848651 < 2 and the probability value is 0,396799 > 0,05. So, the data is normally distributed.

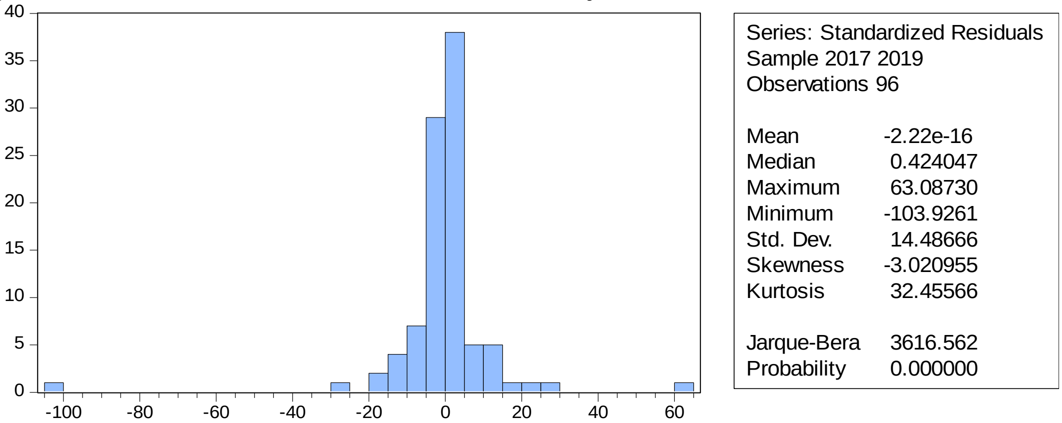

Figure 2. Normality Test Before Data Transformation

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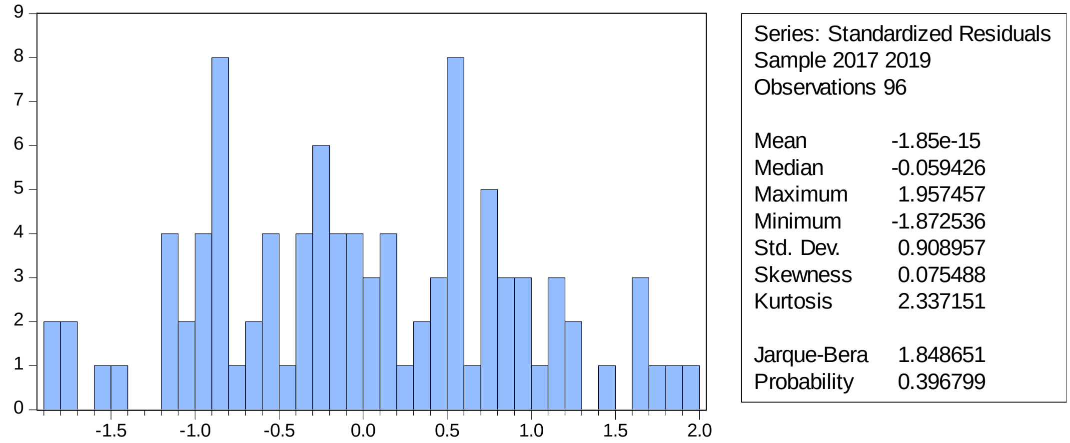

Figure 3. Normality Test After Data Transformation

Multicollinearity Test

If the VIF value is more than 10, this means there is multicollinearity. Conversely, if the VIF value is less than 10, it can be concluded that there is no multicollinearity. The VIF value of the bonus compensation is 1,040814, leverage is 1,000432, profitability is 1,041252, which is smaller than 10. Accordingly, it can be concluded that there is no collinearity between the independent variables. Table 3 presented multicollinearity test.

Table 3. Multicollinearity Test

Variable	Centered VIF	Conclusion
Bonus Compensation	1,053734	No Multicollinearity
Leverage	1,076482	No Multicollinearity
Profitability	1,058030	No Multicollinearity

Source: Secondary data 2020

Heterocedasticity Test

The probability value of bonus compensation is 0,0344, so there is a heteroscedasticity. Even though there is a heteroscedasticity, Basuki and Nano (2017) explained panel data is able to accommodate individual heterogeneity explicitly by admitting individual variables specifically. The ability to control heterogeneity allows panel data to be used to test a complex model and minimizing the bias. Besides, Ghozali and Dwi (2018) stated heteroscedasticity is not a serious problem in a regression model. So, data analysis can still be done even though there is a heteroscedasticity.

Table 4. Heteroscedasticity Test

Variable	Prob.	Conclusion
Bonus Compensation	0,0344	There is a Heteroscedasticity
Leverage	0,1436	No Heteroscedasticity
Profitability	0,5153	No Heteroscedasticity

Source: Secondary Data 2020

Regression Model Estimation

Chow Test

The Chow test is conducted to determine the best regression model between common effect and fixed effect. The result of the chow test is shown in table 5. From the result of chow test, it can be seen the probability cross-section chi -square is 0,0986 > 0,05. So, the model to be used is common effect model.

Table 5. Chow Test

Effects Test	Statistic	d.f	Prob.
Cross-section F	1,064103	(31,61)	0,4080
Cross-section Chi-square	41,499332	31	0,0986

Source: Secondary data 2020

Hausman Test

The Hausman test is done to determine the best regression model between the random effect and fixed effect. Table 6 shows the result of the Hausman Test. The random cross-section probability value is 0,4418 higher than 0,05. So, from the result of the Hausman Test, the random effect model is better than fixed effect model.

Table 6. Hausman Test

Test Summary	Chi-sq Statistic	Chi-Sq. d. f	Prob
Cross-section random	2,691017	3	0,4418

Source: Secondary data 2020

Lagrange Multiplier Test

The Lagrange Multiplier test is done to determine the best regression model between common effect or random effect. If the Breusch Pagan value is more than 0,05 the best model to use is the common effect model. The result of Lagrange Multiplier test showed that value Breusch Pagan is 0,9104 > 0,05. Then, the best regression model to use is common effect. The Lagrange Multiplier test result is shown in table 7.

Table 7. Lagrange Multiplier Test

	Cross-section	Time	Both
Breusch-Pagan	0,012667	0,693702	0,706370
	(0,9104)	(0,4049)	(0,4007)

Source: Secondary data 2020

Multiple Linear Regression Analysis

Panel data regression test is done using the common effect model. The result of the panel data regression can be seen in table 8.

Table 8. Result of Multiple Linear Analyzes

Variable	Coefficient	t-Statistic	Prob.
Bonus Compensation	0.232017	2.381632	0.0193
Leverage	1.622392	2.453617	0.0160
Profitability	12.29473	4.591604	0.0000
C	-4.518284	-2.255820	0.0265

Source: Secondary data processed

Referring to the panel data regression in Table 8, the equations can be formulated as follows:

$$Creative\ Accounting_{it} = -4{,}51824 + 0{,}232017X_{1it-1} + 1{,}622392X_{2it-1} + 12{,}29473X_{3it-1} + e_{it-1}$$

The regression equation can be explained as follows:

a. If the bonus compensation, leverage, and profitability is 0, then the value of creative accounting practices is -4,518284. It means, there is no creative accounting.
b. If the bonus compensation is increased by Rp.1.000.000, it is followed by an increase in creative accounting practices by 0,232017 percent, assuming other variables are constant.
c. If the leverage is increased by one percent, it is followed by an increase in creative accounting practices by 1,622392 percent, assuming other variables are constant.
d. If the profitability is increased by one percent, it is followed by an increased in creative accounting practices by 12,29473 percent, assuming other variables are constant.

Coefficient of Determination

The coefficient of determination (R^2) is used to measure the ability of independent variables in explaining the dependent variable. From table 9 it can be seen the value of the coefficient of determination (R^2) is 0,276155. This means the ability of bonus compensation, leverage, and profitability variables in explaining creative accounting is 27,61 percent. Meanwhile, 72,39 percent creative accounting is explained by other variables that not examined in this research.

Table 9. Coefficient Determination

R-squared	0.276155
Adjusted R-squared	0.252552

Source: Secondary data 2020

F-Test

The result of F-test in table 10 shows the regression model is fit to be used to explain the effect of the independent variables on the dependent variable. F_{value} is greater than F_{table} and the probability value is less than 0,05. because F_{value} is 11,69969 with F_{table} of n = 96 and k = 3 is 2,703.

Table 10. F-Test

F-statistic	11.69969
Prob (F-statistic)	0.000001

Source: Secondary data 2020

Statistical Hypothesis Test

Hypothesis testing in this research is conducted with a t-test. It shows the effect of the independent variable on the dependent variable by assuming other variables are constant.

a. Hypothesis 1 Test (H_1)

The first hypothesis proposed the higher bonus compensation, the higher creative accounting. The result of hypothesis 1 can be seen in table 13 on bonus compensation variable. The t_{value} is 2,381632 with the value of t_{table} $\alpha = 0{,}05$ and (n-k) 96-3 = 93 is 1,66140. So, the t_{value} is higher than t_{table} (2,381632 > 1,66140) with a significance level smaller than α (0,0193 < 0,05) with positive coefficient. Thus, it can be concluded that the higher bonus compensation is followed by the increasing creative accounting practices. **Based on the result, Hypothesis 1 (H_1) which proposed the higher bonus compensation, the higher creative accounting is supported in this research.**

b. Hypothesis 2 Test (H_2)

The second hypothesis proposed the higher leverage will increase creative accounting practice. The result of hypothesis 2 can be seen in table 13 on leverage variable. The t_{value} is 2.453617 with the value of t_{table} $\alpha = 0{,}05$ and (n-k) 96-3 = 93 is 1,66140. So, the t_{value} is higher than t_{table} (2,453617 > 1,66140) with a significance level smaller than α (0.0160 < 0,05). Hence, it can be concluded that the higher leverage is followed by the higher creative accounting. **Based on the result, Hypothesis 2 which proposed the higher leverage, the higher creative accounting is supported in this research.**

c. Hypothesis 3 Test (H_3)

The third hypothesis proposed the higher profitability will increase creative accounting practice. The result of hypothesis 3 can be seen in table 13 on profitability variable. The t_{value} is 4.591604 with the value of t_{table} $\alpha = 0{,}05$ and (n-k) 96-3 is 1,66140. So, the t_{value} is higher than t_{table} (4,591604 > 1,66140) with a significance level smaller than α (0.0000 < 0,05). Therefore, it can be concluded that the higher profitability is followed by the higher creative accounting. **Based on the result, Hypothesis 3 which proposed the higher profitability, the higher creative accounting is supported in this research.**

Discussion of Research Result

The Effect of Bonus Compensation toward Creative Accounting

The result of panel data regression testing on the first hypothesis (H_1) show that bonus compensation affects creative accounting. The higher bonus compensation, the higher creative accounting. The manufacturing companies in this research are known to provide a high level of bonus compensation to the key management. Based on the positive accounting theory by Watts and Zimmerman (1986), the bonus plan hypothesis explains that management will choose accounting policies that can increase bonuses. Therefore, the bonus plan hypothesis of positive accounting theory is supported in this research.

In this research, bonus compensation is measured by the average of key management's bonus compensation. Key management members are people who have the authority and responsibility to plan, lead, and control the company activity. In managing company, management is responsible for managing the business to achieve company goals. Then, the main responsibility of a director is to manage the business, so the goals are achieved.

The company in giving bonus compensation aims to motivate the management to perform as well as possible in achieving company goals. Besides, bonus compensation also aims to provide appropriate incentives for management to make decisions that are consistent with company goals (Blocher *et al*., 2007).

Furthermore, bonus compensation for management can be provided in cash or share (Blocher *et al*., 2007;589). In a business agreement, incentives and bonuses will be given as a feedback for management's performance in running the company's operations. Thus, key management will tend to use their accounting knowledge and skills to achieve a certain goal. Explained in Blocher *et al*., (2007) key management can take advantage of accounting using their knowledge and skills related to cost allocation methods and funding methods to obtain bonus compensation.

This research supports the result of Elfira (2014), which shows the bonus compensation have a positive and significant effect on creative accounting in the kind of earnings management. Elfira (2014) stated that bonus is a reason for managers to managing profit at a certain level to receive bonuses. Furthermore, this research is also supported a research by Kamau *et al*., (2015). Research from Kamau *et al*., (2015) shows bonus compensation positively and significantly affects creative accounting. The majority of Kamau *et al*., (2015) respondents agree that managers are motivated to do creative accounting to maximize the company's or manager's wealth.

Besides, this research also in line with Kusumawardhani and Rosiyana (2016). It is proven that bonus compensation has a significant and positive effect on creative accounting in terms of earnings management. Kusumawardhani and Rosiyana (2016) explained that bonus compensation is one of the motivations for managers to do creative accounting. Managers will try to keep the company profits between the minimum and maximum level of bonuses determination.

The Effect of Leverage toward Creative Accounting

From the result of panel data regression testing, it shows leverage affects creative accounting. The higher the leverage, the higher creative accounting. The manufacturing companies in this research are known to have a high level of leverage. Based on the debt covenant hypothesis in positive accounting theory by Watts and Zimmerman (1986), when a company has the possibility of violating a debt covenants, the management tends to choose accounting technique to record future earnings for the next period to the current period.

The higher the company's leverage ratio, the higher the level of company's debt. The higher company's debt level, the higher the risk in debt agreement. When a company has a debt agreement, the company must maintain its financial ratios at a certain minimum limit (Sulistiawan *et al*., 2011). Hence, the company's management will use their skills and knowledge to do creative accounting. Other than for maintaining debt agreements, companies in applying for loans need to present a good performance that can be seen from financial statements.

Some flexibility in accounting can be used to show company's good performance through financial statements, to gain the creditor's trust. For example, using the First in First Out inventory measurement method to increase the company's profit. Using the straight-line method in calculating the depreciation of fixed asset. Delay the reporting of current period expenses to the next period. Reclassifying account, for example converting long term liabilities into preferred stock or common stock. By reclassifying long term liabilities accounts into preferred stock or common stock, this can reduce the debt position toward assets (Sulistiawan *et al*., 2011). It can be concluded, that the decision of company in choosing a certain accounting method is a kind of creative accounting practice.

The result of this research is in line with Wibisana and Dewi (2015). Companies that have high leverage ratios tend to increase their profit. Also, empirical evidence regarding the effect of leverage on creative accounting is found in Candra and Yulius (2017). The more company is at risk of not being able to pay debts and fulfilling debt covenants, the more likely company doing a creative accounting. Furthermore, the result of this result is also in accordance with the results from Nurliyasari and Saifudin (2017) who found leverage affects creative accounting in terms of income smoothing. The result of this research also consistent with Priharta and Dewi (2019) which found that the higher leverage is followed by higher creative accounting in the terms of earnings management.

The Effect of Profitability toward Creative Accounting

The last hypothesis testing able to prove the effect of profitability on creative accounting. This research support Wibisana and Dewi (2015), and Alexander and Hengky (2017) which shows that profitability has a positive and significant effect on creative accounting in terms of earnings management. Also, this research support Irianto *et al*., (2017) which empirically proves that profitability positively affects creative accounting in terms of tax avoidance.

The companies used as samples in this research are companies listed on the Indonesia Stock Exchange, or a large-scale company. The manufacturing companies in this research consider to generate a low profitability. However, every company has a tendency to do creative accounting, the intensity is related to a certain motivation and goals. Large companies can present lower profitability than actual profits to avoid attracting attention. The higher the profitability of a company, the higher creative accounting. This because if the company's profitability is high, it will result in high taxes and political costs. If the company presents high profits and causes high political costs, this will reduce the company's profits. So, the company will report lower than actual profit by taking advantage of acceptable flexibility in accounting policies.

Several accounting methods can be used to report a lower profit, for example by using the declining balance method to depreciating a fixed asset. Moreover, company management can shorten the useful life of a fixed asset. Companies can also use the Last in First Out (LIFO) method to value inventory. Kieso *et al*., (2013) explained that in using LIFO method, it can reduce profits and lower inventory values. However, the LIFO method is not permitted in Indonesian tax regulation, even though it is permitted in commercial accounting (Sulistiawan *et al*., 2011).

Furthermore, explained in Sulistiawan *et al*., (2011) there are flexibility in the accounting treatment of bonds. Bonds can be recognized as long term investment (held to maturity securities) or short-term investment (trading securities). In presenting lower profits, a company can recognize a bond as a short-term investment when the bond is sold below the market prices (discount), because it causes the company will record it as a loss.

In the positive accounting theory of hypothesis of political cost by Watts and Zimmerman (1986), companies will do creative accounting to avoid or reduce political cost. There are several ways companies can do creative accounting to reduce political cost. According to Sulistiawan *et al*., (2011) by accelerating cost recognition or delaying revenue recognition, companies can present lower profits so that tax costs will be lessen. Other than reducing tax costs, lower profit presentation can also reduce other political costs such as salary increase and sponsorship request. Also, the presentation of lower profits is done by the companies to get subsidies from the government.

CONCLUSION AND IMPLICATION

Conclusion

Based on the results of this study, can be summarized as follows:

1. Bonus compensation affects creative accounting. The higher the bonus compensation, the higher creative accounting.
2. Leverage affects creative accounting. The higher the leverage, the higher creative accounting.
3. Profitability affects creative accounting. The higher profitability, the higher creative accounting.

Implication

Based on the conclusions that have been explained, the implications are:

1. This research found that bonus compensation, leverage, and profitability affects creative accounting. There will always be a loophole in regulation. So, the company need to be wise in taking the advantage of accounting regulation by not doing an illegal creative accounting. The company also should inform the users about the accounting policies used in notes to financial statement, so it will not causing asymmetry information. Therefore, the company may conduct a reasonable and proper creative accounting practice that are a part of operating a well-managed business and delivering value to the stakeholders.
2. This research found that bonus compensation affects creative accounting. The performance of companies are still need an improvement, because it has a high leverage and generate a low profitability. Nevertheless, the bonus compensation given to the key managements are relatively high. Therefore, the company can review the provision of bonus compensation to reduce the possibility of showing a good performance through creative accounting practices.

The company may give the right amount of bonus compensation to motivate for a better performance.

3. Besides, this research also found that leverage affects creative accounting. When a company has the possibility of defaulting or violating a debt agreement, the company can apply for refinancing or rescheduling. Other than that, the company also need to improve their ability to manage the company's assets in order to obtain optimal income. So, it can increase the company's ability to fulfil a debt agreement and pay debts. Then, the company can manage the debt optimally to get economic benefits. So, creditors can give their trust to provide a loan to the company.
4. Based on the findings of this research, creditors can pay more attention to the company's ability in maintain a debt covenant. Also, creditors can analyze the solvency of the company before determining loan grants.
5. Moreover, this research found that profitability affects creative accounting. Therefore, the government can pay more attention and analyze the profitability of companies in withholding the company's tax. Further, the government can review the accounting regulation.

Limitation and Suggestion

1. The independent variable of bonus compensation, leverage, and profitability used in this research is only able to explain its effect on the dependent variable by 27%. Further research can examine other variables such as stock prices, accounting and financial skills, cost of debt, and earnings before interest and tax (EBIT).
2. The sample of this research is reduced quite a lot because 20 companies are outliers. Thus, 20 outlier companies could not be used as research samples. Therefore, further research can increase the number of samples by increasing the research period, for example five years.

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