EARNINGS MANAGEMENT: ENVIRONMENTAL DISCLOSURE, BUSINESS STRATEGY, WATER ACCOUNTING AND LEVERAGE

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ABSTRACT
The purpose of this study to determine the effect of environmental disclosure, business strategy, water accounting and leverage to earnings management in manufacturing companies listed in Indonesia Stock Exchange (BEI). The period of time the study is 4 years ie the period 2014-2017. This study population includes all manufacturing companies listed in Indonesia Stock Exchange (BEI) in the period 2014-2017. The sampling technique used purposive sampling technique. Based on predefined criteria acquired 8 companies. Data used is secondary data obtained from the Indonesia Stock Exchange website. The analytical method used is multiple linear regression analysis. The results showed that environmental disclosure has no effect on earnings management, business strategy has a positive effect on earnings management, water accounting No effect on earnings management and leverage positive effect on earnings management.

Keywords: Environmental Disclosure, Business Strategy, Water Accounting, Leverage and Earning Management

1. INTRODUCTION

The phenomenon of the earnings management practices have occurred in the Indonesian capital market, particularly in manufacturing listed companies in Indonesia Stock Exchange. There are various cases regarding one case management profit*General Electric Company*, A multinational company of technology and services of the United States, based in New York suffered the issue of manipulation of financial statements. The discovery of indications of inflation in the insurance unit of General Electric Company as the need for funding of up to US $ 18.5 billion. After the investigation to obtain evidence. General Electric Company is also not counting oil and gas business properly. Concludes his report he confirms the General Electric Company to manipulate up to US $ 38 billion. the fate of General Electric Company could be akin to WorldCom and Enron. Two of these companies, he had previously searched the imposture action. (Https://www.cnbcindonesia.com)

The concept of earnimg manajemen can be explained by the theory of agency (agency theory) and positive accounting theory (positive accounting theory). The theory describes a relationship between the owner (principal) with other parties, namely the agent (agent) (Paramitha, 2014). The relationship between principal and agent can lead to an imbalance condition information for the agent have a position that has more information about the company than the principal. The existence of the information gap between managers and owners of companies, the management has the opportunity to maximize their interests, one of them with earnings management. Some factors that could affect the company's earnings management practices are Environmental Disclosure, Business Strategy, Water Accounting and Leverage.

Environmental disclosure is the disclosure of information relating to the environment in the company's annual report. If the company does not pay attention to all aspects in the surrounding areas such as employees, customers environment and natural resources as an integral and mutually supportive, then these actions will damage the image of his own company and will end the existence of the company (Paramita, Sujana, and Herath, 2017). Another factor that can affect earnings management practices, business strategy. Business strategy is an integrated planning taking into account the strategic aspects of the company (Paylosa, 2014). Business strategy affect the entire activity of the company for all the activities of business processes, operations, and transactions carried out as well as all business decisions made by managers should be in line with the business strategy (Arieftiara et al., 2013). Then the next factor is water accounting. GPWA is a general purpose water accounting initiated by the Australian government since 2007. GPWA designed to report information about water and water rights to external parties so that they can make decisions about whether it is feasible for example to invest in companies that face the risk of threatening the availability of water or floods, pollutes water, or affect water quality. And the next factor is leverage. Leverage is the ratio between total liabilities and total assets of the company. This ratio indicates the amount of the assets owned by the company are financed with debt. The higher the leverage, the risk that would be faced by investors will be higher and investors will ask for greater profits. Therefore, the greater the leverage then chances managers to manage earnings will be even greater.

2. CONCEPTUAL FRAMEWORK

Enviromental Disclosure influence on Earnings Management

Bewley and Li (2000); Hugnes, et al. (2001); Patten (2002) suggested a negative correlation between environmental performance with environmental disclosure in relation to earnings management (earnings management) environmental disclosure can have a negative impact of earnings management because when companies already disclose environmental disclosure is said that the company has good governance because it is not only oriented towards profit but pay attention to the environment that focuses on the Triple Bottom Line (3P) ie profit, Planet, People so investors or prospective investors assume that the company is far from the practice of earnings management.

H_1: Disclosure Eviromental effect on Earnings Management

Business Strategy Influence onEarnings Management

The research result Miles and Snow (1978) strategy defender ie when it operates in the area of production is relatively stable, thus the company is more concerned with maintaining the portion of a certain market share of the overall market by creating certain products and services as well as the number of customers is stable. Therefore, the company does a lot of money to meet their production needs, but still generate a stable income, the level of earnings management company's actions are also reduced.

H_2: Business Strategy effect on Earnings Management

Water Accounting Influence on Earnings Management

According to the accounting standards formulating body of water, water accounting is a systematic process to identify, recognize, quantify, report and assure information about water rights and other claims on the water, as well as the obligations towards the water. Council water accounting standard setters have established financial accounting methods to record and report the information to the non-financial information. Moreover, it also has been formulated Physical Flow Air (identical Statement of Cash Flows), Consolidated Water Assets and Liabilities Air (identical Balance), and the Statement of Changes in Assets and Liabilities Water Air (identical statement of changes in equity). By pressing water usage fees it will be a positive influence on earnings management practices (Sylvia, 2014).

H_3: Water Accounting effect on Earnings Management

Leverage Influence on Earnings Management

Results of research conducted by Agustia, and Syriac, (2018). stated that Leverage proxied by Debt to Equity Ratio (DER) Positive and significant impact on Earnings Management. This means that greater the leverage ratio, meaning the higher the value of the company's debt. Companies that have a high leverage ratio is due to the large amount of debt compared to assets owned by the company, is expected to perform earnings management practices as its default threatened the company can not meet debt payment obligations on time.

H_4: Leverage effect on Earnings

Management

3. RESEARCH METHOD

Population and Sample

The population in this study is 8 Manufacturing company listed on the Indonesia Stock Exchange (IDX) over a period of 4 years 2014-2017, so there are 32 samples to be processed. The criteria used to select the sample in this study are the following, a manufacturing company listed on the Stock Exchange. Then, a manufacturing company that publishes full financial statements and annual financial statements issued using the currency rupiah (Rp). And only a manufacturing company that publishes R&D Report.

Earnings Management(Y)

Earnings management is measured by using a ratio measurement for distribution of profit as provisions firm category earning management, measuring and calculating the accrual earnings management using discretionary revenue models approach (Stubben 2010). Here is the formula of discretionary revenue models (Stubben 2010):

$$\Delta ARit = \alpha + \beta 1\Delta Rit + \beta 2\Delta Rit \times SIZEit + \beta 3\Delta Rit\ xAGEit + \beta 4\Delta Rit\ xAGE\_SQit +$$

Information:

AR = Receivables end of the year
ΔR = Changes in income
SIZE = Natural log of the total assets of the end of the year
AGE = Natural log of a company's age (years)
GRR_P = Growth Rate in Revenue (0 if negative)
GRR_N = Growth Rate in Revenue (0 if positive)
GRM = Gross Margin
_SQ = Squares of variable
i = Company
t = Year
ε = error

Independent variables

Environmental Disclosure (X_1)

In the present study used the GRI standard for assessing environmental disclosure. Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world, the most widely used sustainability reporting framework and is committed to continuous improvement and application worldwide (www.globalreporting.org).

The approach to calculate the Environmental Disclosure basically refers to 34 environmental performance indicators contained in the Global Reporting Inititive (GRI) G4, while the indicator consists of Materials, Energy, Water, Biodiversity, Emissions, Effluents and wastes, products and services, compliance, transportation , etc., assessment of suppliers on the environment and mechanisms. This measurement is done by matching the items on the check list with the items disclosed value of 0: If the company did not disclose the items. and Score 1: If the company revealed items.

Business Strategy (X_2)

This study uses six proxy for measuring the company's business strategy designed for rated or given a score that reflects the business strategy used by the company (Wardani and Isbela, 2017). To obtain the value strategy, this study uses the measurement of research Bentley et al (2017):

Each component in the rankings per year per indsutri and given a score based kuantilnya. For observations were in the

1. Intense = $\frac{\text{RnD}}{\text{Expense}}$

2. Sales = $\frac{\text{Selling, General and Admin}}{\text{Sales}}$

3. Employee = $\frac{\text{Number of Employees}}{\text{Sale}}$

highest quintile will be given a score of 5, and that is at the second lowest quintile rated 1, The way these assessments are given to all components except the Capital Intensity. The component ratings were given in reverse. Furthermore, the ranking scores add up, so that each observation has a minimum value of 6 and a maximum of 30, Categorization of business strategy relies on the median value of the sample. For observations which have a total value equal to or below the median, categorized into a defender. For observations which have a total value above the median, categorized into prospector.

Water Accounting (X_3)

Water gauge accounting using a water footprinting obtained from the companies that publish financial statements of sustainable (sustainability report) for each company in the research samples. Water footprinting is an indicator, explicit, not only showing volumes of water use and pollution, but also the location. Compared with other water calculation tools, water foot printing provides the most extensive data and methods of calculation of the complete water, because the covers direct and indirect water use and to consider water consumption and pollution. Water foot printing is the volume of water used to produce the product measured through various stages of the production chain. Water usage is measured by the volume of water consumed which refers to water that is used or produced into the manufacture of the product (Hendratno & Agustine, 2018). Here's the formula perhitung water accounting as follows:

Water Footprinting Ratio = LN (nominal disclosure of water (m^3 / ton) Total assets

Leverage (X_4)

Leverage is the ability of a company to meet all its financial obligations at the time the company is liquidated. Leverage measured by using debt to equity ratio. Debt to equity ratio is the ratio used to determine how much debt the company financed by equity.

$$\textit{Debt to Equity ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

4. RESULTS AND DISCUSSION

Descriptive Statistics Analysis Results

Descriptive Statistics

	N	Minimum	maximum	mean	Std. deviation
Earning Management	32	-3.35	1:27	-.3153	.84762
Enviromental_Disclosure	32	.00	.76	.5047	.20295
Business_Strategy	32	.11	.25	.1791	.03486
Water_Accounting	32	-1.97	8.85	.7881	1.94828
Debt_Equity_Ratio	32	.15	2.65	1.0775	.76497
Valid N (listwise)	32				

a. The above table shows the amount of data (N) as many as 32, of the 32 largest profit management data (maximum) was 1.27 in companies AKR Tbk. in 2016, and the smallest value (minimum) is -3.35 at Unilever Indonesia, Tbk in 2014 in 2014. The average (mean) income management amounted to -0.3153 and the standard deviation value 0.84762.
b. Then, Enviromental_Disclosure variable has a maximum value of 0.76 at PT Astra Agro Lestari Tbk, PT Astra International Tbk and Aneka Tambang Tbk throughout 2014 s / d in 2017, which means that Enviromental_Disclosure companies every year increase. And the minimum value of 0.00 at the company Wijaya work, Tbk in 2014 which signifies the year the company experienced difficulties in its disclosure. On average Enviromental_Disclosure ie 0, 5047, with a standard deviation reaches 0.20295.
c. Next, the variable Business_Strategy has a maximum value of 0.25 on the company Astra International Tbk in 2017, which means that the company Business_Strategy increasing every year. And a minimum value of 0.11 in the companyAKR Tbk in 2014 which signifies the year the company experienced problems in the planning of business strategy. On average Business_Strategy is 0.1791, with a standard deviation reaches 0.03486.
d. Next, the variable Water_Accounting has a maximum value of 8.85 on a firm Bukit Asam Tbk in 2016, which means that the company Water_Accounting increasing

every year. And a minimum value of -1.97 in the company Bukit Asam Tbk, 2014 which signifies the year the company experienced difficulties in its disclosure. On average Water_Accounting is 0.7881, with a standard deviation reaches 1.94828.

e. Lastly, the variable Leverage has a maximum value of 2.65 on the company Adhi Karya Tbk in 2014, which means that the leverage of the company each year increased. And the minimum value of 0.15 at the company Indocement Tbk in 2014 which signifies the year the company experienced difficulties in finances. The average leverage is 1.0775, with a standard deviation reaches 0.76497.

Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Residual unstandardized
N		32
normal Parametersa	Mean	.0000000
	Std. deviation	.69809670
Most Extreme Differences	Absolute	.114
	Positive	.095
	Negative	-.114
Kolmogorov-Smirnov Z		.648
Asymp. Sig. (2-tailed)		.796

a. Test distribution is Normal.

SPSS output from the data above can be seen that the value Asymp. Sig. (2-tailed) of 0.796 greater than 0.05, so that data can be said to be normally distributed.

HeterokedastisitasTest Results

Model		**Sig.**
1	(Constant)	.822
	Enviromental_Disclosure	**.532**
	Business_Strategy	**.988**
	Water_Accounting	**.816**
	Debt_Equity_Ratio	**.154**

Based on the test results heteroskedastisitas through glejser test showed that the significant value of each independent variable is above or higher than the value of significance used is 0.05.

MulticolinearityTest Results

Model		**collinearity Statistics**	
		tolerance	**VIF**
1	**(Constant)**		
	Enviromental_Disclosure	**.708**	**1413**
	Business_Strategy	**.840**	**1,191**
	Water_Accounting	**.976**	**1,024**
	Debt_Equity_Ratio	**.683**	**1,463**

Based on tests conducted Multicolinearity showed no independent variables that have a tolerance value of less than 0.10, which means there is no correlation between the variables independent value is more than 95%. The result of the calculation of Variance Inflation Factor (VIF) also showed no independent variables which have more than 10 VIF.

Autocorrelation Test Results

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	**Durbin-Watson**
1	.567a	.322	.221	.74802	**1,395**

a. Predictors: (Constant), Debt_Equity_Ratio, Water_Accounting, Business_Strategy, Enviromental_Disclosure

b. Dependent Variable: Manajemen_laba

Based on the table above the value of Durbin Watson of 1.395, a comparison using the significant value of 5%, the number of samples 32 (n), and the number of independent variables 4 (k = 4), then the table will be obtained Durbin Watson dU value of 1.7352. Because the value DW 1,395 greater than the upper limit (dL) of 1.1602 and less than dU at 1.7352, it can be concluded that there is no autocorrelation.

Hypothesis Test Results

Coefficients

Model		Coefficients unstandardized		standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	**1,899**	.926		2,052	**.050**
	Enviromental_Disclosure	**.106**	.787	.025	.134	**.894**
	Business_Strategy	**-9107**	4,206	-.375	-2165	**.039**
	Water_Accounting	**.055**	.070	.126	.785	**.439**
	Debt_Equity_Ratio	**-.631**	.212	-.570	-2971	**.006**
R= 0.567a **R²**= 0.322					**F_hitung** = 3,201>**F_table** = 2.67	
					Sig = 0.028	

a. Dependent Variable: Earning_Management

Adjusted R^2Test Result (coefficient of determination)

Results Adjusted R-Squared on this model was 0.322 means that the variation changes the rise and fall of Earnings Management can be explained by the Environmental Disclosure, Business Strategy, Water Accounting and Leverage amounted to 32.2%, while the remaining 67.80% is caused by the variable or anything else outside of the variable inspected ,

Partial t_{test}Test Result

Based on t test results on Linear Regression analysis showed Resgresi, it can be concluded the results of the following hypotheses:

a. **Disclosure Eviromental influence on Earnings Management (H1)**
Enviromental_Disclosure t_{count} value by 0.134, while t_{tabel} with level α = 5%, df (nk) = 32-4 obtained ttable value of 1.70113. Thus the t_{count} Enviromental_Disclosure0134< t_{table} 1.70113 and the Sig. 0.894> 0.05, it can be concluded that Enviromental_Disclosure variables in this study had no effect on Earnings Management. Enviromental_Disclosure have towards the positive regression coefficient of 0.106 (10.6%).

b. **Influence Business Strategy to Profit Management (H2)**
Business_Strategy t_{count} value of -2.165, while t_{tabel} with the level of α = 5%, df (nk) = 32-4 obtained t_{table} value of 1.70113. Thus the t_{count} Business_Strategy -2.165< t_{table} -1.70113 and the Sig. 0.039 <0.05, it can be concluded that Business_Strategy variables in this study had an influence on Earnings Management. Business_Strategy have negative towards regression coefficient of -9.107 (9.11%).

c. **Water influence on Earnings Management Accounting (H3)**
Water_Accounting t_{count} value by 0.785, while t_{tabel} with level α = 5%, df (nk) = 32-4 obtained t_{table} value of 1.70113. Thus the t_{count} Water_Accounting0785< t_{table} 1.70113 and the Sig. 0.439> 0.05, it can be concluded that Water_Accounting variables in this study had no effect on Earnings Management. Water_Accounting have negative towards regression coefficient of 0.055 (0.55%).

d. **Effect of Leverage to Profit Management (H4)**
Debt to Equity t_{count} value by -2.971, while ttabel with the level of α = 5%, df (nk) = 32-4 obtained t_{table} value of 1.70113. Thus the t_{count} Debt to Equity -2.971< t_{table} 1.70113 and the Sig. 0.006 <0.05, it can be concluded that the variable leverage in this study had no effect on Earnings Management. Leverage has a negative towards the regression coefficient of 0.631 (63.1%).

5. CONCLUSION

The results of these tests produce evidence that Business Strategy Variable partially negatively affect Earnings Management, according to the research results of the study Miles and Snow (1978). It can be said of the company that the research samples only operates on a relatively stable production area, so the company only focuses on maintaining a certain portion of the market share of the overall market by creating specific products and services as well as the number of customers is stable. Thus, companies can reduce the cost to meet the needs of production, by generating a stable income, thereby profit management company's actions are also reduced. Then, the variable partial Leverage negatively affect earnings management, it means that The lower the ratio of debt to equity, the lower the value of the company's debt. Companies that have a debt to equity ratio is low, it can certainly not be doing earnings management practices because the company is stable and stagnant is because of financial difficulties and can not always meet debt payment obligations on time.

While variable Disclosure Environmental and Water Accounting has no influence on Earnings Management.

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