



Determinants of Corporate Earnings Management on the Indonesian Stock Exchange: An Empirical Study of Fraud and Corruption

Aminullah Assagaf ^{a*}, Nur Sayidah ^a, Ulul Albab ^a, Hadi Sugiyanto ^a
and Alvy Mulyaning Tyas ^a

^a Universitas Dr. Soetomo, Surabaya, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2022/v22i2030677

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/89737>

Original Research Article

Received 25 April 2022
Accepted 14 July 2022
Published 16 July 2022

ABSTRACT

This study aims to examine the phenomenon of corruption fraud which is proxied by earning management in companies listed on the Indonesia Stock Exchange. This study uses the variables of leverage, capital expenditure, and profitability as key variables that influence earning management practices that lead to fraud and corruption. This study uses time-series data from 2017 to 2021 and selects a sample by purposive sampling of as many as 28 companies listed on the Indonesia Stock Exchange. The results of the study found that the key variables of leverage, capital expenditure, and profitability, turned out to have a positive and significant effect on corruption fraud which was proxied by earning management. The contribution of this research is mainly to the management of shareholders, practitioners, and investors to predict the possibility of earning management practices that lead to corruption fraud committed by the company. The originality of this research is mainly in measuring corruption fraud which is projected by earning management, thus providing a reference for future research.

Keywords: *Fraud and corruption; earning management; accounting management.*

1. INTRODUCTION

This study aims to examine the phenomenon of corruption and fraud characterized by earnings management practices carried out by companies on the Indonesia Stock Exchange. This study specifically examines corruption in the context of a conflict of interest as a situation where someone in an organization or company takes action to prioritize personal interests over public interests without considering the values of honesty and fairness. In general, fraudulent acts that are proxies with earnings management practices are difficult to detect by the general public, so it has the potential to harm the public in interpreting the financial statements presented because they are not following the real conditions of the company.

Based on this phenomenon, the research gap in this research is how to detect the occurrence of corruption which is a proxy by earnings management, and what factors influence companies to commit corruption or earnings management.

From these phenomena and research gaps, the researchers are motivated to research the key factors that influence the practice of fraudulent corruption that prioritizes personal interests over public interests without considering the value of honesty. Several previous studies have reported on the key factors that cause corrupt practices through earnings management, namely leverage, profitability, liquidity, and firm size [1,2,3,4,5].

Based on previous research and according to empirical conditions that occurred in several companies listed on the Indonesia Stock Exchange, the researchers have identified several key factors that have a significant effect on corruption which is characterized by the practice of earnings management. The key factors used as independent variables in this study are leverage, capital expenditure, and profitability. This study fills the gap of previous research, especially in the use of capital expenditure variables, although this variable is closely related to the practice of fraudulent corruption, even in certain case studies, it is reported that many corruption frauds occur in investment activities or capital expenditure.

The study identified several types of corruption by what it involves: bribery, theft of assets, patron-age, cronyism or distortion of government expenditure [6,7].

The reasons for choosing this variable as an independent variable are: (a) leverage, because of the consideration that the company wants to show financial performance to the bank that gives credit or fulfills the covenants agreed in the credit. This is what causes companies to practice corrupt practices through earnings management practices to show healthy financial performance. (b) capital expenditure, companies that make investments tend to show healthy financial performance, to prove that the capital expenditures made have produced returns that meet the expectations of the principal or investors. (c) profitability, a company that wants to maintain a certain level of profitability to key stakeholders has the potential to commit fraud and corruption by practicing earnings management.

The results of the research on key variables that influence acts of fraudulent corruption through earnings management can contribute to the public or company stakeholders, to understand and detect corrupt fraudulent practices that are influenced by the level of leverage, investment activities, or capital expenditure and the achievement of certain profitability targets.

From these contributions, this research is very important to do to show that corrupt practices carried out through earnings management are actions that are influenced by various factors so that those who want to detect corrupt practices of corruption that are carried out can see and detect fraud by using the results of this study. The results of this study will show how large the coefficient of each observed variable is so that corruption fraud can be detected through earnings management practices.

This study also uses control variables, namely the level of liquidity and firm size, to eliminate bias in statistical calculations if these variables are not taken into account. Without taking into account the variables of liquidity and firm size, the results of the calculation of the independent variables have the potential to be biased, because the two control variables also affect the practice of earnings management.

The originality of this research is to focus more on the key variables that are empirical and follow the empirical conditions of companies that have the potential to commit fraudulent practices of corruption based on earnings management. This study also has novelty in the use of capital expenditure variables that have not been used in

previous studies, although in empirical conditions there are many case studies of corruption fraud originating from investment activities or capital expenditure. This is what causes the importance of this research, and is significant to be studied to be able to contribute to parties related to the impact of corruption fraud committed through earnings management practices.

1.1 Main Research Problem

Based on the phenomena and research gaps previously stated, the main problems to be studied are as stated below. (a) Does leverage have a significant effect on the frauds proxying the company's earning management practices on the Indonesia Stock Exchange?. (b) Does capital expenditure have a significant effect on the frauds that are proxies for the company's earning management practices on the Indonesia Stock Exchange?. (c) Does profitability have a significant effect on the frauds proxying the company's earning management practices on the Indonesia Stock Exchange?

1.2 Research Objectives and Benefits

Based on the problems mentioned above, the objectives of this study are: (a) To analyze the effect of leverage on the proxies of corruption by the company's earning management practices on the Indonesia Stock Exchange. (b) To examine the effect of capital expenditure on frauds proxying the company's earning management practices on the Indonesia Stock Exchange. (c) Studying the effect of profitability on frauds that are proxied by the company's earning management practices on the Indonesia Stock Exchange.

2. LITERATURE AND HYPOTHESIS DEVELOPMENT

The literature used in this study consists of theory and the results of previous studies related to the discussion that affects corruption fraud which is proxied by earning management.

2.1 Agency Theory

The theoretical basis used in this study is the agency theory developed by Jensen and Meckling (1976) [8]. The use of this theory is relevant to the research objectives, especially because this theory explains two parties who have different interests, namely shareholders or principals who want to maximize dividends per

share or earnings per share, while company managers who want to maximize compensation receipts. Managers can manage the company to achieve the goals desired by shareholders, and managers will be paid a reasonable amount of compensation to be motivated in carrying out their duties and obligations. To achieve the goal.

2.2 Signaling Theory

Signaling theory shows that companies will give signals through actions and communication, [9]. Companies adopt these signals in revealing hidden attributes to stakeholders.

The company tries to provide financial statement information, give signals about various factors that affect the company's financial condition, and communicate strategic and policy steps to improve financial performance. This study uses signaling theory to show that signals of the occurrence of earnings management practices can be anticipated based on the magnitude of the coefficient and changes in key variables that affect corruption fraud which is proxied by earning management.

2.3 Corruption Fraud and Earning Management

Fraud has a broader meaning, which includes acts of corruption and fraud in financial statements, including the practice of earning management. Fraud consists of three groups, namely financial statement fraud, asset misappropriation, and corruption, as stated in [10].

Financial statement fraud can be defined as fraud committed by management in the form of material misstatements of financial statements that are detrimental to stakeholders, for example earning management practices carried out by management for certain purposes that are detrimental to investors and creditors. Several views of previous research stated that earnings management is an act of fraud considering that in earnings management financial statements are presented according to the wishes of management, not factual (as is) with the support of generally accepted accounting standards. If we return to the elements of fraud (conversion, concealment, and theft), earnings management activities fulfill the elements of conversion (manipulating, manipulating) and concealment (hiding, covering up) even though theft does not occur directly (benefit yourself).

Misappropriation of assets can be classified as cash fraud, inventory fraud, other asset fraud, and expense fraud.

Corruption in the context of this discussion is corruption according to ACFE or Association of Certified Fraud Examiners, which is the largest anti-fraud organization in the world that provides anti-fraud education and training and is domiciled in the United States. In this case, corruption is divided into conflicts of interest, bribery, illegal giving, and extortion. Conflict of interest is a situation where someone in an organization prioritizes personal interests over public interests without considering the values of honesty and fairness. In another sense, a conflict of interest occurs between two actors, known as the principal and the agent. The principal is someone who assigns responsibility or obligations to the agent. This relationship can occur between managers and employees, commissioners and directors, leaders and members, and others. In the context of an organization, conflict occurs when someone does something without the interests and goals of the organization and ignores the code of Ethics. This usually happens when someone holds a very important position or title in the company and uses that position to resolve issues that are unfair to other company employees. In addition, conflicts of interest may cause employees to act outside the interests of the company. The emergence of this conflict is bad for the reputation and image of a company.

Earnings Management as stated in [2,3], argues that earnings management is a process carried out to take steps or actions that are carried out

intentionally with the provisions of accounting principles that are still generally applicable to provide results at the desired profit level. . In this study, to detect the practice of earnings management, measurement with real activities earning management approach is used.

2.4 Conceptual Framework

Based on the literature and empirical conditions of the phenomenon under study, to explain the research gap of this study, the following is described in the form of a conceptual framework, to show the causal relationship between the dependent variable, control variable, and independent variable.

The conceptual framework image shows that this study uses three independent variables, namely the leverage variable obtained based on the ratio of total debt to total equity, the capital expenditure variable which is calculated from investment expenditure or fixed asset growth over time, and the profitability variable which is calculated based on the growth in earnings before interest. and taxes or EBIT.

The control variable is used to anticipate the occurrence of bias in the relationship between the independent variable and the dependent variable if it is taken into account in the analysis model. The control variables consist of liquidity and firm size, which have a positive and significant effect on the dependent variable of corruption fraud which is a proxy by earning management.

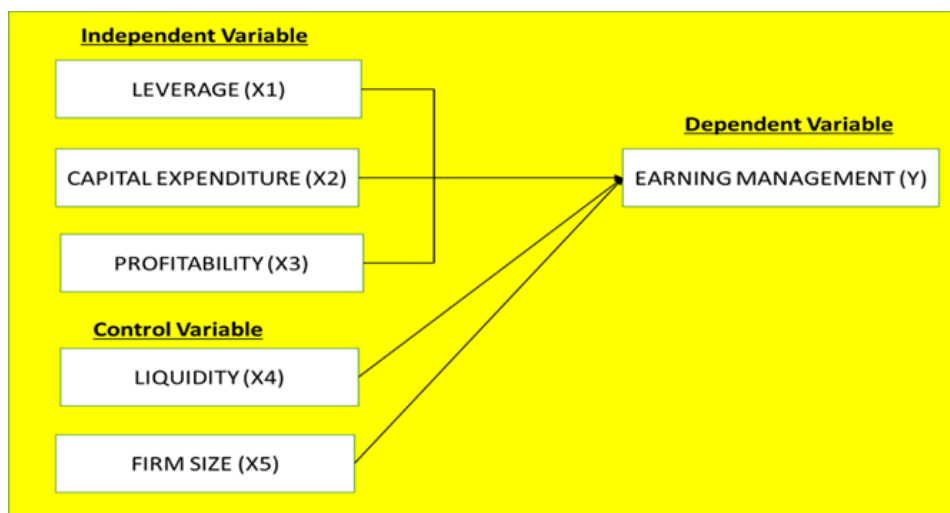


Fig. 1. Conceptual framework

2.5 Hypotheses Development

2.5.1 The effect of leverage on corruption fraud proxies earning management

Several previous studies found that leverage take effect positive and significant impact on earnings management as reported by [11,12,13,14,15]. Based on previous research, this study proposes the following hypothesis H1.

H1: Leverage has a positive and significant effect on the frauds proxying the company's earning management practices on the Indonesia Stock Exchange.

2.5.2 Effect of capital expenditure on corruption fraud proxied by earning management

Previous research has not been found using this variable, although many case studies have reported that corrupt practices are carried out in investment activities or capital expenditure. The use of the capital expenditure variable is a novelty in this study, while previous studies used firm size as reported by [16], and [17]. Based on the novelty, this study proposes the following hypothesis H2.

H2: Capital expenditure has a positive and significant effect on frauds that occur on a proxy with practice earnings management of companies on the Indonesia Stock Exchange.

2.5.3 Influence profitability against corruption fraud in the earning management proxy

Some previous research state that profitability has a positive and significant effect on corrupt practices, as found by [8,18,19,20]. Based on these findings, this study proposes the following hypothesis H3.

H3: Profitability has a positive and significant effect on frauds that occur on a proxy with practice earnings management of companies on the Indonesia Stock Exchange.

3. METHODOLOGY

3.1 Data, Population, and Sample

This study uses a purposive sampling method, which determines the research sample based on the subjective considerations of the researcher

with certain criteria so that the data obtained represents the state of the population and can meet the research objectives. From a population of 766 issuers or companies listed on the Indonesia Stock Exchange until the end of 2021, this study selected a sample of 28 companies with the criteria that they are included in the category of actively transacted shares on the Indonesia Stock Exchange or included in the LQ45 group. The data used is based on time series and cross-section for the last 5 years, so 140 observations are obtained from panel data.

3.2 Operational Definition and Measurement of Variables

The operational definition and measurement of the variables of leverage, capital expenditure, profitability, liquidity, firm size, and earning management, is to use the following previous research references.

3.3 Leverage

Leverage is measured based on the ratio between total debt and total as used in previous research by [21,22,23,24,25], the following.

$$\text{Leverage}(X1) = \frac{\text{Total Debt}}{\text{Total Equity}}$$

3.4 Capital Expenditure

Capital expenditure is measured by the formula used in previous studies by [17,26,27], below.

$$\text{Capital Expenditure}(X2) = \frac{\text{Fixed asset}(t) - \text{Fixed asset}(t-1)}{\text{Fixed asset}(t-1)}$$

3.5 Profitability

Profitability is measured by using growth in earnings before interest and taxes or EBIT as used in previous research by [20,9,28] the following.

$$\text{Profitability}(X3) = \frac{\text{EBIT}(t) - \text{EBIT}(t-1)}{\text{EBIT}(t-1)}$$

3.6 Liquidity

Liquidity is measured based on the ratio of current assets to current liabilities as previously used by [25] and [21], as follows.

$$\text{Liquidity}(X4) = \frac{\text{Current Asset}}{\text{Current liabilities}}$$

3.7 Firm Size

Firm size is measured based on operational capacity which is reflected by the value of wealth or assets owned by the company. The variable measurement formula is based on research by [29,28,30], the following.

$$\text{Firm size (X5)} = \text{Log (Total Assets)}$$

3.8 Earnings Management

The measurement of this variable uses real activities earning management approach as [31,32,10,33], in equation (1) to equation (5) below.

Equation (1): Operating cash flow (CFO),

$$\text{CFO}_t/A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \beta_1 (S_t/A_{t-1}) + \beta_2 (\Delta S_t/A_{t-1}) + e_t$$

Equation (2): Cost of good sold (COGS),

$$\text{COGS}_t/A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \beta (S_t/A_{t-1}) + e_t$$

Equation (3): Change in inventory (Δ INV),

$$\Delta \text{INV}_t/A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \beta_1 (\Delta S_t/A_{t-1}) + \beta_2 (\Delta S_{t-1}/A_{t-1}) + e_t$$

Equation (4): Production (PROD),

$$\text{PROD}_t/A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \beta_1 (S_t/A_{t-1}) + \beta_2 (\Delta S_t/A_{t-1}) + \beta_3 (\Delta S_{t-1}/A_{t-1}) + e_t$$

Equation (5): Discretionary expense (DISEXP),

$$\text{DEXP}_t/A_{t-1} = \alpha_0 + \alpha_1 (1/A_{t-1}) + \beta (S_{t-1}/A_{t-1}) + e_t$$

Procedure measurement of this variable begins by using equation (1) to equation (5), then the residual or abnormal is calculated from the five equations (ACFO, ACOGS, Δ AINV, APROD, and ADEXP). Real value activities earnings management is obtained from the sum of residual abnormal as follows.

$$Y = \text{AREAL} = \text{ACFO} + \text{ACOGS} + \Delta \text{AINV} + \text{APROD} + \text{ADEXP}$$

Where: Y = AREAL = abnormal or residual from real activities; ACFO = abnormal or residual cash flow from operating; ACOGS = abnormal or residual cost of goods sold;AINV= abnormal or residual changes in inventory value; APROD = abnormal or residual production costs; ADEXP =

abnormal or residual discretionary expense; At = total assets at the end of year t; St : sales period t.

3.9 Analysis Model

To prove the hypothesis, this study uses multiple regression analysis models, such as the following equation model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where: X_1 = leverage, X_2 = capital expenditure, X_3 = profitability, X_4 = liquidity, X_5 = firm size, Y = earnings management, β_0 = constant, $\beta_1 \dots \beta_5$ = regression coefficient, and e = error.

4. RESULTS AND DISCUSSION

Before testing the hypothesis, the first step that needs to be done is to test the classical assumptions of multicollinearity, autocorrelation, heteroscedasticity, normality and linearity. Furthermore, after being declared as testing and fulfilling the classical assumptions in the hypothesis test, a goodness of fit test is carried out using the coefficient of determination (R^2), F-statistical test, t-statistical test, the direction of positive or negative influence as well as the regression coefficient of each observed variable.

4.1 Classic Assumption Test

The results of the classical assumption test that have been obtained are as shown in Table 1 below, namely: (a) multicollinearity has been met with the value of Variance inflation factor or VIF < 10 with a value of 3.45, Tolerance or TOL > 0.10 with a value of 1.23, so it is stated that there is no multicollinearity in the model used in the study. this. (b) The autocorrelation test uses the Durbin-Watson test with the result that the DW statistic is 2.67 greater than the table DW (dl = 1.6445 and dU = 1.7967), so it is stated that in the model there is no indication of autocorrelation in the regression model. (c) The heteroscedasticity test uses the Glejser test with the results of the t-statistical test for each independent variable showing a significant level > 0.10 ($X_1=0.251$, $X_2=0.452$, $X_3=0.356$, $X_4=0.245$, $X_5=0.126$), so that there is no indication of heteroscedasticity in the regression model used in this study. this. (d) Normality test using Kolmogov-Smirnov with the results, namely Asymp.Sig (2-tailed) = 0.200 greater than 0.05 so it is stated that the data used in this regression is normally distributed. (e)

Linearity test, using the Durbin-Watson test with a statistical DW value of 2.74 greater than the table DW (dL = 1.6445 and dU = 1.7967) so that it is stated that the regression model used has met the linearity requirements. After testing the classical assumptions of multicollinearity, autocorrelation, heteroscedasticity, normality and linearity, as stated above, it can be stated that the model used in this study can be used to test the hypothesis.

After testing the classical assumptions of multicollinearity, autocorrelation, heteroscedasticity, linearity, and normality, it is concluded that the model used in this study can be used to test hypotheses with multiple regression analysis. The hypothesis testing phase begins with the model test used with the goodness of fit test using the coefficient of determination (R²), F-statistic test, t-statistic test, the direction of a positive or negative influence as well as the regression coefficient of each observed variable.

4.2 The goodness of Fit Test

The goodness of fit describes how well the model fits a series of observations made. The determinant coefficient (R²) of the goodness of fit as an important measure in the regression reflects the model's ability to explain changes in the dependent variable caused by the independent variable.

The calculation results show the value of the determinant coefficient (R²) at 0.588 which means that this research model can explain 58.5% of the phenomenon of changes in the

independent variables of leverage, capital expenditure, and profitability to changes in the dependent variable of corruption which is proxy by earning management. The remaining 41.5% is explained by other variables that are not used in this study.

4.3 Regression Equation

The results of the calculation of the regression coefficients as shown in Table 2 can be described in the following regression equation.

$$Y = 11.78 + 0.056 X1 + 0.087 X2 + 0.016 X3 + 0.721 X4 + 1.163 X5$$

The regression coefficient of the independent variable shows the magnitude of the effect of these variables on changes in the dependent variable of corrupt fraud practices which is a proxy for earning management. Meanwhile, the trend towards the influence of the independent variables on earning management is determined by the magnitude of the negative coefficient or positive coefficient of each independent variable that is observed as in the regression equation above.

The independent variable leverage or X1 with a coefficient of 0.056 indicates that each increase in one unit of the leverage variable or X1 will cause an increase in earning management or corrupt fraudulent practices which are proxies for earning management 0.056. On the other hand, if there is a reduction of one unit of leverage or X1 it will cause a decrease in corrupt fraudulent practices which are proxies for earning management of 0.056.

Table 1. Classical Assumptions – Linear Regression

Classical Assumption	
a. Multicollinearity	
- VIF	3.45
- Tolerance	1.20
b. Autocorrelation	
- Durbin-Watson Statistic	2.67
c. Heteroscedasticity	
- Leverage (X1)	Sig. 0.251
- Capital Expenditure (X2)	0.452
- Profitability (X3)	0.356
- Liquidity (X4)	0.245
- Firm size (X5)	0.126
d. Normality	
- Asymp. Sig (2-tailed)	0.200
e. Linearity	
- Durbin-Watson Statistic	2.74

The independent variable capital expenditure or X2 with a coefficient of 0.087 indicates that each increase of one unit of the capital expenditure variable or X2 will cause an increase in earning management or corrupt practices which are proxies for earning management 0.087. On the other hand, if there is a reduction of one unit of capital expenditure or X2, it will cause a decrease in corrupt fraudulent practices which are proxies for earning management of 0.087.

The independent variable profitability leverage or X3 with a coefficient of 0.016 indicates that each increase of one unit of profitability or X3 variable will cause an increase in earning management or fraudulent practices of corruption which is proxied by earning management 0.016. On the other hand, if there is a reduction of one unit of profitability or X3, it will cause a decrease in the practice of corrupt fraud which is a proxy for earning management of 0.016.

The liquidity control variable or X4 with a coefficient of 0.721 indicates that each increase in one unit of the liquidity variable or X4 will cause an increase in earning management or fraudulent practices of corruption which are proxies with earning management of 0.721. On the other hand, if there is a reduction of one liquidity unit or X4 it will cause a decrease in corrupt fraud practices which are proxied by earning management of 0.721.

The control variable firm size or X5 with a coefficient of 1.163 indicates that each additional unit of firm size variable or X5 will cause an increase in earnings management or corrupt fraudulent practices which are proxied by earnings management of 1.163. On the other

hand, if there is a reduction of one firm size or X5, it will cause a decrease in corrupt fraudulent practices which are proxy with earnings management of 1,163.

Based on the regression coefficient, it can be used to predict the level of earning management if there is a change or if the value of each independent variable is known. For example, by using the realization data of the last independent variable, it is possible to predict the value of management earnings or the level of corruption fraud committed by companies on the Indonesia Stock Exchange or IDX. The prediction results are then compared with the realization of the earning management value of each company that is the research sample. The deviation between the predicted value and the realized value indicates the level of deviation, which means that the smaller the difference, the closer to reality, for example, a deviation of about 1% to 5%, it can be stated that this research can be used by management or agents, company owners or principals, and other stakeholders to predict the possibility of corruption fraud as a proxy for earning management. If a deviation of 1% is achieved, it can be stated that the possible deviation that will occur between the realized value and the predicted value is in the range of 1%. Expressed as an inaccurate prediction, if the deviation between realization and prediction is relatively high, for example, exceeds 10%. A relatively high deviation, for example, more than 10%, means that the probability that the realization will deviate from the prediction is quite large, making it difficult to believe, which means that the greater the value of the deviation, the lower the level of accuracy. and other stakeholders to predict the possibility of

Table 2. Factors affecting earnings management

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Variables	Predict	Coefficient	Sig.
(Constant)		11.782	0.619
X ₁	+	0.056	0.001
X ₂	+	0.087	0.001
X ₃	+	0.016	0.005
X ₄	+	0.721	0.838
X ₅	+	1.163	0.614
F-Statistics		40.60	0.000
Adjusted R Square			0.588
Dependent Variable : Y			

Source: Company's financial statements on the Indonesia Stock Exchange in 2017 - 2021
 Where: X₁= leverage, X₂= capital expenditure, X₃= profitability, X₄=liquidity, X₅= firm size, Y= earnings management

corruption fraud which is a proxy by earning management. If a deviation of 1% is achieved, it can be stated that the possible deviation that will occur between the realized value and the predicted value is in the range of 1%. Expressed as an inaccurate prediction, if the deviation between realization and prediction is relatively high, for example, exceeds 10%. A relatively high deviation, for example, more than 10%, means that the probability that the realization will deviate from the prediction is quite large, making it difficult to believe, which means that the greater the value of the deviation, the lower the level of accuracy. and other stakeholders to predict the possibility of corruption fraud which is a proxy by earning management. If a deviation of 1% is achieved, it can be stated that the possible deviation that will occur between the realized value and the predicted value is in the range of 1%. Expressed as an inaccurate prediction, if the deviation between realization and prediction is relatively high, for example, exceeds 10%. A relatively high deviation, for example, more than 10%, means that the probability that the realization will deviate from the prediction is quite large, making it difficult to believe, which means that the greater the value of the deviation, the lower the level of accuracy. it can be stated that the possible deviation that will occur between the realized value and the predicted value is in the range of 1%. Expressed as an inaccurate prediction, if the deviation between realization and prediction is relatively high, for example, exceeds 10%. A relatively high deviation, for example, more than 10%, means that the probability that the realization will deviate from the prediction is quite large, making it difficult to believe, which means that the greater the value of the deviation, the lower the level of accuracy. it can be stated that the possible deviation that will occur between the realized value and the predicted value is in the range of 1%. Expressed as an inaccurate prediction, if the deviation between realization and prediction is relatively high, for example, exceeds 10%. A relatively high deviation, for example, more than 10%, means that the probability that the realization will deviate from the prediction is quite large, making it difficult to believe, which means that the greater the value of the deviation, the lower the level of accuracy.

4.4 F-Statistics Test

Simultaneous hypothesis testing shows that the influence of the independent variable and the control variable has a significant effect on

corruption fraud as a proxy for earning management, as well as the F-statistic test with a value of 40.6 at a significant level of 0.000. This shows that the overall independent variables and control variables consisting of leverage, capital expenditure, profitability, liquidity, and firm size simultaneously have a significant effect on the practice of corruption fraud which is proxied by company earnings management on the Indonesia Stock Exchange.

4.5 t-Statistic Test

The discussion of research results to prove the H1, H2, and H3 hypotheses was carried out using the t-statistic test, namely a partial test of the effect of the independent variables leverage, capital expenditure, and profitability on the dependent variable of corruption fraud as a proxy for earning management. The results of the hypothesis test are declared to be accepted or according to predictions if the direction of the positive or negative influence is following the calculation results. Furthermore, hypotheses H1, H2, and H3 support the hypothesis that the independent variables leverage, capital expenditure, and profitability have a significant effect on the dependent variable corruption which is proxied as earnings management, at a level less than or equal to 0.05 or 5%, where the t-statistic value is greater of the t-table values, as stated below.

4.6 The Effect of Leverage on Corruption or Earning Management Practices (Hypothesis H1)

The results of the t-statistical test calculation show that the leverage variable has a positive effect with a regression coefficient of 0.056 and a significance level of 0.001. This means that the findings in this study are following the predictions and support the H1 hypothesis, namely the leverage variable has a positive and significant effect on corruption or earning management practices.

Empirically it is proven that the greater the leverage or the higher the composition of the use of debt to total assets, the higher the earning management practice or fraudulent corruption committed by the company in the presentation of financial statements. This is done to show financial institution lenders that the company can meet the covenant target in the form of achieving a certain level of profit, for example, return on investment or ROI is required to reach a certain

percentage, so that company management is encouraged to commit fraud or corruption through earning management practices in the presentation of annual financial statements.

4.7 Effect of Capital Expenditure on Corruption or Earning Management Practices (Hypothesis H2)

The results of the calculation of the t-statistical test show that the capital expenditure variable has a positive effect with a regression coefficient of 0.087 and a significance level of 0.001. This means that the findings in this study are following the predictions and support hypothesis H2, namely the capital expenditure variable has a positive and significant effect on corruption or earning management practices.

Empirically it is proven that the greater the capital expenditure, the higher the earning management practice or corruption fraud committed by the company in the presentation of financial statements. This is done to show investors or shareholders that the investment or capital expenditure can generate a decent or relatively high return. This is what drives the company's management to commit fraud or corruption through the practice of earning management in the presentation of the annual financial statements.

4.8 The Effect of Profitability on Corruption or Earning Management Practices (Hypothesis H3)

The results of the t-statistical test calculation show that the profitability variable has a positive effect on corruption fraud with a regression coefficient of 0.016 and a significance level of 0.005. This means that the findings in this study are following the predictions and support the H3 hypothesis, namely the profitability variable has a positive and significant effect on corruption or earning management practices.

Empirically it is proven that the greater the achievement of profitability, the higher the earning management practice or fraudulent corruption committed by the company in the presentation of financial statements. This is done to show shareholders that the profitability achieved is capable of producing decent or relatively high profitability. The higher the target for achieving the company's profitability, the higher the incentive for company management to

commit fraud or corruption through the practice of earning management in the presentation of annual financial statements.

4.9 Effect of the Control Variable

The control variables consisting of liquidity and firm size have no significant effect on fraud, corruption, or earning management practices. This is mainly due to the liquidity variable and firm size variable which are not directly related to the corruption fraud projected by earning management practices. The liquidity variable is used as a comparison between current assets and current liabilities while earning management is carried out to influence income and costs in recording or reporting, so it can be stated that the liquidity variable has no significant effect on earning management practices [34,35]. The firm size variable, which is measured based on the logarithm of total assets, does not appear to be directly related to earning management practices that regulate the accounting records of income and costs.

5. CONCLUSION

The results of this study have proven the hypothesis that the identified key variables affect the dependent variable of corruption fraud which is a proxy for earning management, which can be concluded as follows.

- a. Leverage variable has a positive effect on corruption fraud which is proxy with practice earnings management with a coefficient of 0.056 and a significant level of 0.001. This means that a high level of leverage will encourage an increase in practice earnings management carried out by companies on the Indonesia Stock Exchange.
- b. The capital expenditure variable has a positive effect on corruption fraud which is a proxy with practice earnings management with a coefficient of 0.087 and a significant level of 0.001. This means that an increase in the amount of investment or capital expenditure will encourage an increase in practice earnings management carried out by companies on the Indonesia Stock Exchange.
- c. Variable profitability has a positive effect on corruption fraud which is proxied by practice earnings management with a coefficient of 0.056 and a significant level of 0.005. This means that the level of

profitability high will encourage an increase in practice earning management to maintain performance and management performance appraisal by the company's main stakeholders on the Indonesia Stock Exchange.

6. IMPLICATIONS

With this research, the managerial implication that arises is that the company's management must be careful when carrying out corrupt fraudulent practices, because these actions can be detected through variables that affect corrupt fraudulent practices projected by earning management.

7. LIMITATION

This study has limitations mainly due to the limited use of secondary data according to financial statement information published via the internet. It is necessary to support data obtained from primary data sources related to internal management policies in earnings management practices carried out by companies listed on the Indonesia Stock Exchange. For this reason, it is necessary to continue this research using primary data directly obtained from the company's key person, so that more realistic results are obtained and at the same time complement this research.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Syaputra R. Influence of profitability, liquidity, leverage and company size on earnings management. *Ecosystem Journal*. 2022;11:79–85. Available: <https://doi.org/10.35134/ekobiste.k.v11i2.316>
2. Suhono CM, Muslih M, Pratama F. The effect of profitability, free cash flow, and liquidity on earnings management (case study on non-banking BUMN companies listed on the Indonesia stock exchange 2015-2019) the effect of profitability, free cash flow, and liquidity to. *E-Proceedings of Management*. 2021;8(5):5323–5330.
3. Suhono Diana N, Aini N. The effect of good corporate governance, company size, and financial performance on earnings management (empirical studies on state-owned enterprises listed on the Indonesia stock exchange 2014-2018). *Journal of Accounting Tax and Business*. 2021;2(1):1–17. Available: <https://journal.unsika.ac.id/index.php/IJATB/article/view/5322>
4. Prayitno V. Factors affecting real earnings management. *emerging markets: Business and management studies journal*. 2020; 6(2):47–57. Available: <https://doi.org/10.33555/ijembm.v6i2.116>
5. Yimenu KA, Surur SA. Earning management: From agency and signaling theory perspective in Ethiopia. *Journal of Economics, Management, and Trade*. 2019;24(6):1–12. Available: <https://doi.org/10.9734/jemt/2019/v24i630181>
6. Larmour P, Wolanin N. *Corruption and anti-corruption*. ANU Press; 2013.
7. Bastida F, Guillamón MD, Ríos AM. The impact of mayors' corruption on Spanish municipal spending. *Accounting Magazine-Spanish Accounting Review*. 2022; 25(1):107-20.
8. Adi SW, Putri WAP, Permatasari WD. Profitability, leverage, firm size, liquidity, and total assets turnover on liquidity, and total assets turnover on real earnings management (an empirical real earnings management (an empirical study on the mining company classification study on the mini. *Indonesian Accounting and Financial Research*. 2020;5(2):129–140. Available: <https://doi.org/10.23917/reaction.v5i2.12403>
9. Rista NCO. ASEAN corporate governance scorecard, financial performance, and disclosure of corporate social responsibility on firm value. *EPRA International Journal of Multidisciplinary Research (IJMR)*. 2020; 191–202. Available: <https://doi.org/10.36713/epra4799>
10. Ahmad L, Suhara E, Ilyas Y. The effect of audit quality on earning management within manufacturing companies listed on Indonesian stock exchange. *Research Journal of Finance and Accounting*. 2016; 7(8):132–138. Available: www.iiste.org
11. Wiyadi Trisnawati R, Sasongko N, Fauzi I. The effect of information asymmetry, firm size, leverage, profitability and employee

- stock ownership on earnings management with accrual model. *International Journal of Business, Economics, and Law*. 2015; 8(2):21–30.
12. Alfina C, Sambuaga EA. The influence of opportunistic behavior, leverage, financial distress on earnings management. *Ultimaccounting: Journal of Accounting Science*. 2021;13(1):60–74. Available:<https://doi.org/10.31937/akuntansi.v13i1.1947>
 13. Widiasmara A, Andika F, Saputri E. The effect of financial characteristics on earnings management moderated by corporate governance * El efecto de las características financieras en la gestion de resultados moderado por el gobierno corporativo O efecto de las características financieras sobre. 2021;24(57):151–170.
 14. Asim A, Ismail A. Impact of leverage on earning management: empirical evidence from the manufacturing sector of Pakistan. *Journal of Finance and Accounting Resear*. 2019;ch, 01(01):70–91. Available:<https://doi.org/10.32350/jfar.0101.05>
 15. Irawati N, Marlina L, Sipayung F. Analysis of the impact of leverage, value added, and size on earning management and financial performance of Indonesian shariah banking. 2019;100(Icon):404–409. Available:<https://doi.org/10.2991/icoi-19.2019.69>
 16. Bangun N, Economics F. Effect of corporate governance, information asymmetry, and firm size on earning management. *Ikögretim Online*. 2021;20(3):351–365. Available:<https://doi.org/10.17051/ilkonline.2021.03.34>
 17. Yuliani R, Hadi DA. The factors of capital expenditure, leverage, profitability, and company value affect the property sector. *Solid State Technology*. 2020; 63(3). Available:www.solidstatetechnology.us
 18. Kalbuana N, Suryati A, Pertiwi CPA. Effect of company age, audit quality, leverage, and profitability on earnings management. *International Journal of Economics, Business, and Accounting Research (IJEBA)*. 2022;6(1):389–399. Available:<https://jurnal.stie-aas.ac.id/index.php/IJEBA/article/view/4796/2057>
 19. Fathihani F. The influences of capital structure, company growth, profitability, and company sizes on profit management; 2020. Available:<https://doi.org/10.4108/eai.26-9-2020.2302688>
 20. Dian Primanita Oktasari. Effects of capital structure, profitability, and firm size towards earning management in manufacturing companies. *EPRA International Journal of Research & Development (IJRD)*. 2020;7838:74–83. Available:<https://doi.org/10.36713/epra4334>
 21. Nuryana I. Factors influencing earnings management of manufacturing companies on the IDX. *International Journal of Multidisciplinary Research and Growth Evaluation*. 2022;103–110. Available:<https://doi.org/10.54660/anfo.2021.3.1.8>
 22. Yanuarso M, Wijayanti DM, Haryono S. The influence of ownership structure, debt structure, and independent commissioner on earning management. *Al-Qaeda Journal*. 2021;6(2):29–48. Available:<https://doi.org/10.23971/jaq.v6i2.3190>
 23. Nadilla T, Ulfah A, Hayati H, Midesia S, Puspita D. The effect of leverage and earning per share on earning management (a study of companies listed in indonesia stock exchange); 2019. Available:<https://doi.org/10.4108/eai.18-7-2019.2288646>
 24. Fadlli ME, MM, K. The effect of cash holding, firm size, and financial leverage to earning management in state-owned enterprises (SOEs). *Journal of Accounting Auditing and Business*. 2020;3(1):91. Available:<https://doi.org/10.24198/jaab.v3i1.25462>
 25. Picauly L, Sitohang SA. Determinants of earning management with sales growth as moderating variable in consumer goods companies on the IDX. *Journal of Accounting & Management Innovation*. 2017;1(1):26–37. Available:<https://ejournal.medan.uph.edu/index.php/jam/article/view/179/52>
 26. Haryanto T, Retnaningrum M. The effect of capital expenditure on profitability with the size of company as the moderating variables; 2020. Available:<https://doi.org/10.4108/eai.5-8-2020.2301085>
 27. Sihombing T, Susanto SA. Analysis of the effect of capital expenditure, business risk, and profitability on the capital structure of

- companies on property industry. 2021; 13(2):257–270.
28. Nur Ainun Bangun VN. Effect of bid-ask spread, leverage, and firm size on earning management. *Journal of Accounting Paradigm*. 2020;2(2):863. Available:<https://doi.org/10.24912/jpa.v2i2.7669>
29. Wuryani E. Company size in response to earnings management and company performance. *Journal of Economics, Business, and Accountancy | Ventura*. 2013;15(3):491. Available:<https://doi.org/10.14414/jebav.v15i3.117>
30. Ghofir A, Yusuf Y. Effect of firm size and leverage on earning management. *journal of industrial engineering & management research*. 2020;1(3):218–225. Available:<https://jiemar.org/index.php/jiemar/article/view/81>
31. Roychowdhury S. Earnings management through real activities manipulation. *Journal of Accounting and Economics*. 2006;42(3):335–370. Available:<https://doi.org/10.1016/j.jacceco.2006.01.002>
32. Louisa Siahaya S, Paulina Sandanafu S, Aponno C, Lilian Angela Sadubbun V. Factors affecting real earnings management: Evidence from Indonesia stock exchange. *Journal of Asian Finance*. 2021;8(8):85–0091. Available:<https://doi.org/10.13106/jafeb.2021.vol8.no8.0085>
33. Mudjiyanti R. The effect of tax planning, ownership structure, and deferred tax expense on earning management. 2018; 231(Amca):379–381. Available:<https://doi.org/10.2991/amca-18.2018.104>
34. Nengsih N. The influence of corporate governance, tax avoidance, leverage, and company size to earnings management: empirical study from Indonesia's banking companies 2015-2017. *Scholars Bulletin*. 2019;11650(1):1–8. Available:<https://doi.org/10.21276/sb.2019.5.1.1>
35. Wahyono W, Novianto AN, Putri E. The effect of CSR disclosure, corporate governance mechanism, auditor independence, auditor quality, and firm size on earning management. *Indonesian Accounting and Finance Research*. 2019; 4(3):156–170. Available:<https://doi.org/10.23917/reaction.v4i3.9339>

© 2022 Assagaf et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/89737>