
Internal Control, Debt Risk, CEO Education, and Real Earnings Management in Consumer Non-Cyclical Companies in Indonesia

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ABSTRACT

This study aims to prove the effect of internal control, debt risk and CEO education on real earnings management with KAP Big4, ROA, Firm Size, and OCF as control variables. The population in this study are *non-cyclical consumer* sector companies in Indonesia listed on the IDX for the period 2021 to 2023. The data used is secondary data in the form of company annual reports. The sampling technique used *purposive sampling* and obtained 58 companies with a total of 174 data. The data analysis technique used is panel data regression analysis with the help of the EViews 12 program. The results concluded that real earnings management is not influenced by internal control, debt risk, and CEO education level, but is influenced by one control variable, namely ROA. This implies that real earnings management practices in non-cyclical consumer sector companies are more influenced by company financial variables than non-financial variables, namely the quality of internal control and CEO education.

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1. INTRODUCTION

The demands on each company are usually different, but basically every company is required to always try to maintain and provide improvements to its performance so that it can easily compete with other companies in all aspects starting from the aspects of information and control. To deal with existing competition, companies must have many ways to improve their performance in the world of business competition. With these pressures, there is tension that can have an impact on the decision-making process and manager behavior, especially when the organization is experiencing financial difficulties. (Chi & Gooda, 2024; Wali & Masmoudi, 2020)..

Conceptually, financial distress can occur if the total liquidity of assets is smaller than the total amount of creditor claims. (Chi & Gooda, 2024). This situation at any time can have a direct impact on

the company's performance in the future which can cause bankruptcy if it occurs in a long period of time (Fan et al., 2013). (Fan et al., 2013). At the time of the financial crisis in the world, companies must respond by restructuring or taking corrective action in order to get out of the crisis, if the company is experiencing financial difficulties, it is possible that its income will not reach investors' expectations, which will lead to a decrease in stock prices and company value. This condition may cause the company to be delisted. Companies that want to maintain their listing status but are experiencing financial difficulties may have considerable incentives to manipulate their earnings. (Chi & Gooda, 2024).

Earnings manipulation carried out by managers of a company is commonly referred to as earnings management. Earnings management itself is defined as an activity carried out by managers in terms of selecting and determining accounting decisions and activities that can affect company profits with the aim of successfully arriving at certain earnings reporting results (Andira & Ratnadi, 2022). (Andira & Ratnadi, 2022). Earnings management activities carried out by managers can affect the credibility and quality of reporting financial statements so that it will reduce the credibility and quality of these financial statements. A financial report if earnings management has been carried out will make the financial statements biased and can also reduce reliability and relevance which has the opportunity to affect the confidence of users of financial statements to be able to believe the nominal results of manipulation or engineering from earnings management activities as a nominal that is not engineered without engaging in earnings management activities (Mostafa, 2017). (Mostafa, 2017).

Earnings management by managers is usually carried out using two methods, the first method is the real-based earnings management method and the second is the accrual-based earnings management method, but usually managers most often carry out earnings management activities with the real earnings management method (Subekti, 2012). (Subekti, 2012). Basically, real-based earnings management is usually covered by managers in the activities carried out by the company on a daily basis during a certain accounting period. This is what makes real earnings management tend to be less easy to detect by regulators and auditors (Hamza et al., 2015). (Hamza et al., 2015). This causes real earnings management that is usually carried out by managers to be considered more risky to cause danger and risk than accrual-based earnings management because it can have an influence on business decision-making activities and cash flow directly. In addition, real earnings management activities are usually hidden in normal business activities, which makes real earnings management difficult to detect. (Anagnostopoulou & Tsekrekos, 2017)..

Managers carry out accrual earnings management activities by means of accrual discretion, where managers do so by making changes to the accounting methods that are usually used or by making changes to estimates in recording transactions that can affect the company's income. Meanwhile, real earnings management activities can be carried out by manipulating the real activities carried out by the company which have a direct impact on the company's cash flow. Accrual earnings management is easy to detect and gets supervision from regulators and auditors. Therefore, some managers are slowly starting to switch to real earnings management methods, because they are less vulnerable to supervision by regulators and auditors. (Ridanti & Suryaningrum, 2021).

According to several studies, it shows that some companies in the manufacturing sector are proven to carry out real earnings management. As has been proven in research (Nurmayanti, 2021) which shows evidence that the company has carried out earnings management activities by increasing the average profit by 0.35650 in the operating cash flow section. In research (Andira & Ratnadi, 2022) shows the results that companies carry out real earnings management by reducing earnings on average by -0.37. In research (Ridanti & Suryaningrum, 2021) manufacturing companies on average carry out real earnings management by reducing profits worth -0.0003. In research (Trisnawati, 2022) shows the results that companies carry out real earnings management by reducing profits worth -0.019915. As well as in research (Sulhia, 2021) by showing the results that manufacturing companies carry out real earnings management activities by increasing the average profit of 19.951633.

This study adopts the phenomenon of real earnings management from previous research to further understand how companies manipulate operational activities to achieve certain financial reporting objectives because the phenomenon of real earnings management is not reported in the press. From several previous studies, it is revealed that maufaktur sector companies are indicated to carry out real earnings management. In this study we chose the *consumer non-cyclicals* sector because this sector is one of the closest sectors to the manufacturing sector. Where the *consumer non-cyclicals* sector is a sector that produces and distributes fundamental or primary goods and services. Companies included in this sector include: beverages, food retail and basic goods, tobacco and household products (www.nhis.co.id).

The emergence of accounting scandals regarding the honesty of accounting information provided to investors and leading to reduced investor confidence in the company is one of the problems that arise due to the failure of corporate governance. This failure is not something that can be underestimated by financial specialists and accounting researchers to be able to further study internal control, and expand research that has a relationship with behavior related to earnings management. (Wali & Masmoudi, 2020). One of the things that must be remembered is that the information regarding the company's profit report contained in the financial statements is one that is very important for investors and potential investors, therefore the company's management must always try and make efforts to continue to maintain the stability of its profits so that there are no significant fluctuations. From this, management plays an important role when evaluating financial statements, it makes management often related to the manipulation of financial data information.

A low internal control environment can open up opportunities for companies to be able to carry out manipulations on management activities that they actually carry out in increasing revenue that is overstated in abnormal cash flows by increasing or adding to the production or discretionary spending. (Cahyaningrum et al., 2022).. In previous research conducted by (Skaife et al., 2011) explains that if a company can carry out improvements to internal control, the company can reduce earnings management behavior to a lower level. Thus it can be interpreted that if a company has low internal control, the opportunity for managers to manipulate in increasing income by writing down excess cash flow that is considered abnormal by increasing production activities or discretionary costs. In research(Liu & Huang, 2020) internal control with good value, will be considered to reduce the occurrence of earnings management, because internal control has a negative effect on earnings management.

In addition to internal controls, another external factor that can affect real earnings management is the sharp increase in financial debt risk. Frequent *defaults* on corporate debt can exacerbate the corporate credit crisis and contribute to low *risk aversion*. When a public company experiences financial difficulties, it is likely that its earnings do not match investors' expectations, causing a decline in stock prices and company value. This triggers management to manipulate earnings (Chi & Gooda, 2024).

Research on the impact of financial debt risk on real earnings management decisions is still very limited. Research that discusses this topic is still very rare because financial difficulties can change the shift from accrual to real activities, and this can affect company behavior, including strategies for managing income. Therefore, this study will raise a topic that can strengthen or weaken the results of previous studies. When a company is in a "*negative tailspin*", its managers' efforts to survive will take precedence over concerns about the quality of their reporting, this provides evidence to support the opinion that managers have the potential to carry out real earnings management when the company is experiencing a financial crisis. (Chi & Gooda, 2024).

One of the things that affects the performance and success of a company is the selection of the right human resources. Therefore, it is important for companies to choose the right CEO. In research conducted by (Wally & Baum, 1994) there is a favorable relationship between the speed of strategic decision making with cognitive complexity and formal education of the CEO. From there it can be concluded that CEOs with higher levels of general cognitive abilities have strong analytical talents, high levels of cognitive complexity, and are likely to be able to achieve intelligence and design activities in the decision-making process more quickly.

The CEO of an innovative firm will substitute profit maximization procedures with manipulation to convey a favorable message to the market due to the conservative character he/she develops as a result of accounting education. CEOs with higher levels of education have greater cognitive complexity, greater capacity to absorb new information, and the ability to put new ideas into practice. In addition, managers with higher levels of education are better able to weigh the pros and cons of various options when deciding how to handle organizational issues, leading to better decisions, with this knowledge, managers better understand the risks and consequences of real earnings management. CEOs with a good educational background may be more aware of the long-term impacts of real earnings management, including potential reputational losses, legal issues, or negative influences on future company performance. (Chi & Gooda, 2024). In Indonesia itself, research that touches on the topic of CEO education level on real earnings management is still rarely researched.

From the explanation of the relationship between real earnings management and internal control, financial debt risk and CEO education that has been proven by previous researchers, this study will prove the relevance of previous research results with different places, years and companies. This study focuses on the effect of internal control, debt risk, CEO education with real earnings management in *consumer non-cyclicals* companies listed on the IDX in 2021-2023. In this study there are also control variables including company size, *Operating Cash Flow* (OCF), BIG4 Public Accounting Firm, and *Return On Asset* (ROA).

This research is a replication of research (Chi & Gooda, 2024) which examines the effect of internal control, debt risk, CEO education on real earnings management in China using regression analysis (random effect regression). The similarities contained in this study with research (Chi & Gooda, 2024) is both examining what factors can affect real earnings management, namely by using the independent variable internal control and debt risk and using the dependent variable real earnings management. The difference between this research and research (Chi & Gooda, 2024) among others: 1) The sample used by previous research was all energy sector companies in China. In this study, the sample used is *non-cyclical consumer* companies listed on the Indonesia Stock Exchange, 2) The research period used by the previous one was 2010-2017, while this study used the period 2021-2023, 3) previous research was conducted in China while this research was conducted in Indonesia.

Literature Review

According to agency theory, effective internal control indicates a strong internal environment with a reliable reporting environment. Internal control regulations state that the purpose of internal control is to ensure the reliability of financial reporting, improve the effectiveness of business operations, and comply with laws and regulations. Internal control is a process of realizing the internal system plan based on continuous supervision. Previous literature on sustainability disclosures states that effective internal controls improve the quality of disclosures that help companies to fulfill disclosure requests from various stakeholders (Tan et al., 2020). (Tan et al., 2020). Therefore, principals can use internal control systems to ensure that agents act in accordance with the interests of the principal. This includes regular monitoring and auditing of managers' activities.

Signal theory explains that signaling is done by managers to reduce information asymmetry. Signal theory can also help the company (agent), owner (principal), and outside the company reduce information asymmetry by producing quality or integrity of financial statement information. (Nuraini Elita, 2024). Signal theory suggests that negative or positive information when conveyed by the signal giver will be useful for the recipient. In signal theory, the underlying basis is that the receiver will react when the signal giver is credible due to information asymmetry (Yasar et al., 2020). (Yasar et al., 2020). Therefore, companies with low debt risk tend to report their financial statement information transparently, because companies with low debt risk are assumed to be good companies and are predicted not to experience bankruptcy.

The principle of *Upper Echelon Theory* (UET) recognizes that the results of the selection of corporate strategies and organizational performance usually vary, which is influenced by the characteristics possessed by top management. (Jamaliyah, 2020). In this study, the level of education of top management can have an influence on strategy selection and outcomes in the company, which can be a consideration for companies in choosing who can be appointed as CEO. Where there is a suspicion that the level of education of the President Director affects earnings management in the company's financial statements. It aims to observe and explain the situation and conditions of the company's internal and external environment (company life cycle), and strive to provide optimal company performance by identifying and implementing company strategies. (Nurmayanti, 2021).

The Relationship Between Internal Control and Real Earnings Management

The importance of maintaining the quality of information to be provided to stakeholders to maintain their trust in investing in the company is needed in running a company. (Cahyaningrum et

al., 2022). From an agency perspective, this is the basis where the shareholder is the *principal* and the manager is the *agent*, where the *principal* authorizes the *agent* to make decisions on behalf of the *principal*. The existence of differences in interests between the *agent* and *the principal* raises conflicts between them due to differences in information received between related parties. (Hadi & Afriyenti, 2022).. So from this, internal control is needed to suppress the conflict.

A corporate environment that is considered to have good internal control is able to suppress the opportunity for manipulation of activities carried out by the company that occur to increase company revenue (Cahyaningrum et al., 2022). (Cahyaningrum et al., 2022).. If management enjoys the benefits of high earnings management, managers may opportunistically ignore the capacity of internal control procedures to achieve desired reporting objectives. In addition, firms that lack incentives to implement effective internal control systems may respond to mandatory compliance by thinking only of complying with existing regulations, rather than making a genuine effort to improve internal control systems and, thus, the quality of their reporting (Wali & Masmoudi, 2020). (Wali & Masmoudi, 2020).

In previous research (Chi & Gooda, 2024) shows the results of companies that tend to have high internal control will be able to manage real earnings management with low and businesses that have a low level of internal control will increase real earnings manipulation. In line with research (Wali & Masmoudi, 2020) shows that a high level of internal control has a negative effect on real earnings management and good internal control makes financial reporting more trustworthy for investors. Likewise, the results of research (Ridanti & Suryaningrum, 2021) showed a significant negative effect on internal control on real earnings management. In research (Cahyaningrum et al., 2022) Proving that the better the level of internal control that exists in company activities means that there will be less real earnings management, this can be interpreted that if a company has a high quality level of internal control, it will effectively inhibit or reduce the possibility of real earnings management behavior. In research (Hadi & Afriyenti, 2022) found that Internal Control has a significant negative effect on real earnings management in the sampled companies.

H1: Internal control has a negative effect on real earnings management

The Relationship Between Debt Risk and Real Earnings Management

High debt risk will make the company predicted to experience bankruptcy, so managers will try to cover up the situation by providing false information to investors in their financial statements. The occurrence of information asymmetry like this needs to be minimized, so that companies *going public* can inform the state of the company transparently to investors. Investors always need symmetrical information as a determination in investing funds in a company. Thus companies with low debt risk will tend to signal the actual information, and investors will have more confidence in the company because the signal given can be used as a guarantee for the current central condition (Sirat, 2015). (Sirat, 2015).

Managers of financially healthy companies use earnings management to achieve various objectives such as smoothing company profits and meeting analyst expectations, but managers of

companies experiencing financial problems may use earnings management to stay afloat or avoid delisting. Companies with a high level of debt risk are considered more likely to carry out real earnings management due to the greater pressure on these companies. Despite the fact that real earnings management is more costly and high risk. (Chi & Gooda, 2024). Therefore, the hypothesis results that are applied are as follows:

H2: Debt Risk has a positive effect on real earnings management

The Relationship Between CEO Education and Real Earnings Management

The upper echelon theory literature argues that the level of education reflects the skills and abilities of the CEO. Thus, a high level of manager education means that the manager is more knowledgeable and capable of managing information and making decisions (Hambrick & Mason, 1984). (Hambrick & Mason, 1984). Managers' demographic characteristics including age, social status, experience, as well as education are usually used to assess top management perceptions in research, this is because demographic characteristics can reflect top management cognitive differences. . According to the echelon theory, the assessment of a decision that will be taken by the CEO when making a strategy for the company, one of which is earnings management, can be influenced by the characteristics possessed by the CEO of the company itself. (Nurmayanti, 2021).

The CEO's education level is highly valued in the world of work, because CEOs with higher education are considered to have good characteristics by a company. The company considers that CEOs with higher education will be more capable and will have better abilities in carrying out their duties and realizing the strategies that the company has designed to increase its performance, this is considered to reduce real earnings management practices that managers usually use to increase company performance. Therefore, companies can improve their performance and reduce real earnings management practices by selecting leaders with a high level of education. (Arisa, 2022).

H3: CEO Education negatively affects real earnings management

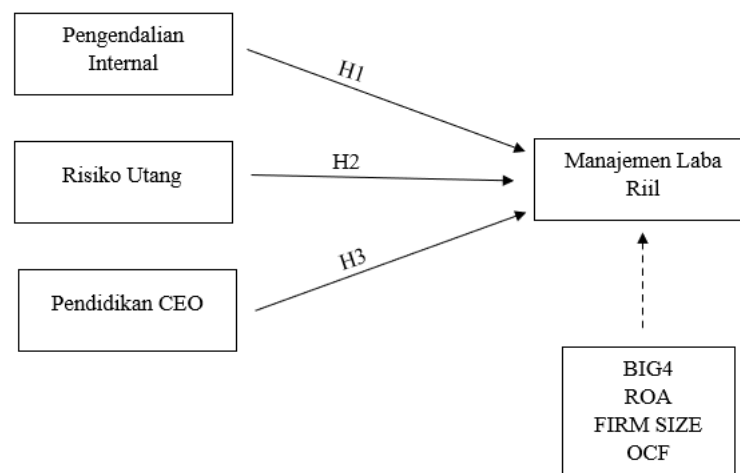


Image 1 frame of mind

2. METHOD

Population, Sample, and Sampling Technique

This study takes a population of all companies engaged in the *consumer non-cyclicals* sector in Indonesia from 2021-2023. The sample taken from the population consists of companies included in the *consumer non-cyclicals* sector that have been listed on the IDX during 2021 - 2023. Based on the Indonesia Stock Exchange's www.idx.co.id website, there were 98 *consumer non-cyclicals* companies that went public in 2021. The sample selection from this study used *purposive sampling*, what is meant by *purposive sampling* itself is a sample selection method based on the objectives and targets of certain studies in a non-random manner, (Sugiyono, 2015). The sample criteria that will be used in the study are as follows:

Table 1. Sample Description

No.	Criteria	Total
1	<i>Consumer non-cyclicals</i> companies that have been listed on the IDX in 2021 - 2023	97
2	Companies that do not report complete annual reports during 2021-2023	(39)
	Total companies sampled	58
	Research period 2021-2023	3
	The amount of data used in the study	174

Variable Measurement

Name	Definition	Measurement
Dependent Variable		
Real Profit Management	Real Earnings Management is an activity where earnings manipulation is carried out by management with the aim of deceiving data users from the information contained	$CFO_{i,t}/A_{i,t-1} = X_0 + X_1(1/A_{i,t-1}) + X_2(S_{i,t}/A_{i,t-1}) + X_3(\Delta S_{i,t}/A_{i,t-1}) + \varepsilon_{i,t}$ <p>CFO shows real earnings management practices that are</p>

	<p>in the financial statements by changing the normal activities carried out by the Company by making deviations, deviations made are usually in the form of promoting prices abnormally and reducing discretionary costs such as costs for conducting research and development, advertising and maintenance. (Roychowdhury, 2006)..</p>	<p>carried out with the company's cash flow operating flow lower than the normal level. If the value of the residual result is negative, then the company is suspected of having carried out real earnings management through sales manipulation. (Manopo & Nugrahant, 2023).</p> $PROD_{i,t}/A_{i,t-1} = X_0 + X_1(1/A_{i,t-1}) + X_2(S_{i,t}/A_{i,t-1}) + X_3(\Delta S_{i,t}/A_{i,t-1}) + X_3(\Delta S_{i,t-1}/A_{i,t-1}) + \varepsilon_{i,t}$ <p>PROD shows that real earnings management practices are carried out with the company's production costs, with the finding that the company's production costs are much higher than the normal level. If the result of the residual value is positive, the company is suspected of carrying out real earnings management through production costs. (Manopo & Nugrahant, 2023).</p> $DISX_{i,t}/A_{i,t-1} = X_0 + X_1(1/A_{i,t-1}) + X_2(S_{i,t}/A_{i,t-1}) + \varepsilon_{i,t}$ <p>DISX shows that real earnings management practices are</p>
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		<p>carried out with discretionary costs, discretionary costs in question such as research and development costs, advertising costs, administrative and general costs. The company will be detected doing real earnings management through discretionary costs if the result of the residual value is found to be negative. Then the result of the residual value will be multiplied by -1. (Manopo & Nugrahant, 2023).</p> <p>Where</p> <p>$A_{i,t-1}$: total assets of company i in year t - 1</p> <p>$S_{i,t}$: Net sales of company i in year t</p> <p>$\Delta S_{i,t}$: change in net sales between year t-1 and t</p> <p>The three measures manipulate real activities into a single proxy, RM, by taking their sum as follows:</p> $RM_{i,t} = CFO_{i,t} + PROD_{i,t} + DISX_{i,t}$
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		Where: $RM_{i,t}$ real earnings management of company i in year t
Independent Variable		
Internal Control	<p>Internal control is a process that is influenced by management and employees who are composed of design provisions that aim for management to have sufficient confidence that the company has reached its goals and has met the planned targets. (Cahyaningrum et al., 2022). Internal control has the aim of obtaining the quality of information that will be provided by the company to stakeholders with the aim of maintaining the trust of shareholders and other investors. (Cahyaningrum et al., 2022).</p>	<p>Internal control is measured using 3 criteria based on <i>Internal Control (IC)</i> by (Chi & Gooda, 2024) including the following:</p> <ul style="list-style-type: none"> • <i>Internal Control Deficiencies (ICD)</i> is given a value of 1 if the company discloses deficiencies in its internal control report, 0 otherwise. • <i>Internal Control Material Weaknesses (ICMW)</i> when companies disclose weaknesses in their internal control reports, 0 otherwise. • <i>Internal Control Deficiencies Level 1 (ICD1)</i> is assigned a value of 1 if the company is penalized by a regulatory agency or issued with an audit opinion indicating an internal control deficiency and 0 otherwise. <p>From these three criteria, the above elements are then summed up to determine the internal control score and ICD severity</p>

		<p>level. The severity of the company's deficiency is given a value of 0 - if the company has strong internal control, the company is given a value of 1 - if the company has an internal control deficiency, given a value of 2 - if the company has a more significant deficiency and given a value of 3 - if the company has a material internal control weakness. (Chi & Gooda, 2024).</p>
<p>Financial Debt Risk</p>	<p>Financial debt risk according to Ohlson's calculation, known as the Ohlson O-score bankruptcy probability model, is a measure to assess the risk of bankruptcy of a company based on various financial ratios (Ohlson, 1980). This ratio is known as the debt-to-equity ratio. This risk can provide an overview of the company's capital structure so as to see the level of risk of non-payment of debt.</p>	$O_score_{i,t} = -1,32 - 0,407 \times \log TA_{i,t} + 0,63 \times (TL_{i,t}/TA_{i,t}) - 1,43 \times (WC_{i,t}/TA_{i,t}) + 0,076 \times (CL_{i,t}/CA_{i,t}) - 1,72 \times (OEMEG_{i,t}) - 2,37 \times (NL_{i,t}/TA_{i,t}) - 1,83 \times (OIBD_{i,t}/TA_{i,t}) + 0,285 \times (EBITWO_{i,t}) - 0,521 \times (NI_{i,t} - NI_{i,t-1}) / (NI_{i,t} - NI_{i,t-1})$ <p>Where: $\log TA_{i,t}$: total assets $TL_{i,t}/TA_{i,t}$: Total liabilities divided by total assets</p>

		<p>$WC_{i,t}/TA_{i,t}$: Working capital to assets</p> <p>$CL_{i,t}/CA_{i,t}$: current liabilities to assets</p> <p>$OEMEG_{i,t}$: a dummy variable that is worth 1 if the company's total liabilities exceed its total assets and 0 otherwise.</p> <p>$NL_{i,t}/TA_{i,t}$: product of net income and total assets</p> <p>$OIBD_{i,t}/TA_{i,t}$ operating income before depreciation divided by total assets</p> <p>$EBITWO_{i,t}$: a dummy variable that takes the value 1 if the company's net profit is negative for 2 consecutive years and 0 otherwise.</p> <p>$NI_{i,t} - NI_{i,t-1}$: net profit of the company from the current year and the previous year respectively.</p> <p>The cut-off point in the Ohlson model is a value of 0.50, the company is classified as bankrupt if the O-Score value is above 0.50. Conversely, if the company's O-Score value is below 0.50, the company is predicted not to experience bankruptcy. (Irawan et al., 2016).</p>
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<p>CEO Education</p>	<p>A person's education is one of the benchmarks of a company's success (Hambrick & Mason, 1984) This is because a person's level of education will reflect a person's cognitive level and skills that are useful in processing information and skills in distinguishing stimuli in processing information, one of which is related to important decisions made by managers (Wiersema & Bantel, 1992). (Wiersema & Bantel, 1992). In assessing a person's ability, educational background has a very important role, because from an educational background it can be seen the extent of knowledge and competence possessed by that person. (Andira & Ratnadi, 2022)..</p>	<p>To determine the educational background of the CEO, using ordinal variables (Zhou et al., 2021).:</p> <ul style="list-style-type: none"> • 1 = technical high school and below • 2 = associate degree • 3 = undergraduate • 4 = master • 5 = doctorate
<p>Control Variables</p>		
<p>BIG 4</p>	<p>The Big 4 Company is the nickname given to the largest public accounting firm, where there are four largest public accounting firms in the United States. The four public accounting firms in question</p>	<p>Audit quality can be measured using the Big4 dummy variable, namely with a nominal 1 if one of the financial statements is audited by one of the four largest accounting firms (Big4) and 0 if the</p>

	are Ernst & Young (EY), Deloitte, Klynveld Peat Marwick Goerdeler (KPMG), and PricewaterhouseCoopers (PwC).	company's report is audited by other than the four largest accounting firms (Big4). (Ridanti & Suryaningrum, 2021).
ROA	In this study using indicators of the success achieved by the company to earn profits, the higher the profitability, the higher the ability to earn profits or commonly referred to as profitability.	$ROA = \frac{\text{Laba bersih setelah pajak}}{\text{Total Aktiva}}$ (Agustia & Suryani, 2018).
Firm Size	Company size is a scale that can be classified into large and small companies in various ways: total assets, log size, sales, and market capitalization (Agustia & Suryani, 2018).	$\text{Company Size} = \ln(\text{Total Assets})$ (Agustia & Suryani, 2018).
Operating Cash Flow (OCF)	Cash flow from the company's operating activities related to income, expenses, income, and expenses. (Ridanti & Suryaningrum, 2021).	Scaled by total assets. $OCF = \frac{\text{Arus kas operasi}}{\text{Total aset}}$ (Ridanti & Suryaningrum, 2021).

Data Analysis Technique

In this study, hypothesis testing and data analysis techniques used are regression analysis using panel data and with the help of Eviews 12 software. In the panel data regression model chosen, it aims to provide a benchmark for the extent to which the strength of the relationship between two or more variables shows the direction of the relationship with the dependent variable. The regression equation in this study is as follows:

$$RM_{it} = \beta_0 + \beta_1 IC_{it} + \beta_2 FRD_{it} + \beta_3 ACAD_{it} + \beta_4 BIG4_{it} + \beta_5 ROA_{it} + \beta_6 SIZE_{it} + \beta_7 OCF_{it} + \varepsilon_{it}$$

Description:

RM: Real Earnings Management

β_0 : Constant

$\beta_1 - \beta_7$: Regression Coefficient

IC: Internal Control

FRD: Financial Debt Risk

ACAD: CEO Education

BIG4: Audit Quality

ROA: Financial Performance

SIZE: Company Size

OCF: Cash Flow from Operating Activities of the Company

3. RESULTS AND DISCUSSION

Results

Descriptive Statistical Analysis

In descriptive statistical analysis describes or describes a data that is seen through the minimum, maximum, average (mean), and standard deviation values, which have been collected as they should be without intending to make general conclusions. (Ghozali & Ratmono, 2017). The variables used in this study are real earnings management, internal control, debt risk, CEO education, BIG4, *Return On Assets* (ROA), *Firm Size*, *Operating Cash Flow* (OCF). An overview of the variables in this study can be seen in the following table:

Table 2. Descriptive Statistics Test Results

Date: 10/05/24 Time: 23:59
Sample: 2021 2023

	Y	X1	X2	X3	K1	K2	K3	K4
Mean	-1.15E-07	0.051724	-0.241852	3.344828	0.477011	0.045622	28.85387	1.566918
Median	0.025965	0.000000	-0.521000	3.000000	0.000000	0.051693	28.99778	1.373620
Maximum	0.778540	1.000000	2.145090	5.000000	1.000000	0.826907	32.85992	4.757538
Minimum	-0.942610	0.000000	-2.731044	1.000000	0.000000	-0.399674	24.65497	0.144924
Std. Dev.	0.200169	0.222109	0.636748	0.816415	0.500913	0.128239	1.784595	0.964776
Skewness	-1.318952	4.048195	0.479564	-0.579747	0.092051	0.691318	-0.106481	0.972279
Kurtosis	8.500371	17.38788	5.506682	4.793945	1.008473	11.49205	2.635037	3.365382
Jarque-Bera Probability	269.7915 0.000000	1976.079 0.000000	52.22450 0.000000	33.07931 0.000000	29.00052 0.000001	536.6932 0.000000	1.294494 0.523485	28.38239 0.000001
Sum	-2.00E-05	9.000000	-42.08217	582.0000	83.00000	7.938225	5020.573	272.6438
Sum Sq. Dev.	6.931711	8.534483	70.14244	115.3103	43.40805	2.845035	550.9667	161.0271
Observations	174	174	174	174	174	174	174	174

(Source: EViews 12 output data processed, 2024)

Based on the table above, real earnings management (Y1) has an average value of -0.000000115, based on this value, it shows that companies carry out real earnings management by reducing average earnings by -0.000000115. Internal control (X1) has an average value of 0.051724, based on this value, it shows that many companies sampled have strong internal control. Debt risk (X2) has an average value of -0.241852, based on the Oscore value, the average value is below the *cut off* value of 0.50, this indicates that the companies sampled are in good health or have little debt risk. CEO education (X3) has an average value of 3.344828, where the value indicates that the companies sampled have CEOs with an average last education equivalent to Bachelor (S1).

Classical Assumptions

In panel data regression, not all classic assumption tests are used, only multicollinearity and heteroscedasticity are required. (Napitulu, 2021). Where the results of the multicollinearity test on the data used are the correlation value between independent variables smaller than 0.80, it can be concluded that the model passes the multicollinearity test. And the results of the heteroscedasticity test on the data used are the value of heteroscedasticity in each variable has a value of more than 0.05, therefore there are no symptoms of heteroscedasticity or pass the heteroscedasticity test. In this study, the panel data regression model chosen was *Random Effect Regression* (REM).

Determinant Coefficient Test

Table 3. Determinant Coefficient Test Results

R-squared	0.107550	Mean dependent var	-4.84E-08
Adjusted R-squared	0.069917	S.D. dependent var	0.121535
S.E. of regression	0.117209	Sum squared resid	2.280516
F-statistic	2.857830	Durbin-Watson stat	1.592736
Prob(F-statistic)	0.007675		

(Source: EViews 12 output data processed, 2024)

From the table above, it can be seen that the adjusted R-squared value is 0.069917, which means that internal control, debt risk and CEO education are able to explain the real earnings management variable by 06%, the remaining 94% is explained by other variables outside the model. And based on the table above, it can be seen that the probability value is 0.007675, which means $f < 0.05$, meaning that the variables of internal control, debt risk and CEO education are able to influence real earnings management.

Hypothesis Test

Table 4. Statistical Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.021285	0.417299	0.051008	0.9594
X1	0.036935	0.068094	0.542402	0.5883
X2	0.013239	0.021114	0.627037	0.5315
X3	0.010294	0.021436	0.480234	0.6317
K1	0.057719	0.047731	1.209247	0.2283
K2	0.394817	0.112320	3.515100	0.0006
K3	-0.001850	0.014292	-0.129423	0.8972
K4	-0.029740	0.020531	-1.448580	0.1493

(Source: EViews 12 output data processed, 2024)

The Effect of Internal Control on Real Earnings Management

From testing the first hypothesis (H1), the results show a probability value of 0.5883 which is greater than 0.05 with a regression coefficient of 0.036935. This shows that internal control has no effect on real earnings management. These results indicate that there is no effect on the relationship between real earnings management and internal control in *non-cyclical consumer* companies in Indonesia, which means that the first hypothesis (H1) is rejected. The lack of effect of internal control is because the focus of internal control is only on financial reporting and the prevention of direct accounting errors or fraud, such as manipulation of numbers on the balance sheet or income statement. Existing internal controls may not be designed to capture manipulation through operational activities, which often occurs in the context of real earnings management. Thus the effectiveness and efficiency of internal controls disclosed by *consumer non-cyclicals* sector companies cannot be measured significantly. A well-designed internal control system will still have limitations, from which management can find loopholes to manipulate real transactions that are not detected by the internal control system. Real earnings management practices are subtle and occur through normal company activities, so internal controls that focus on financial reporting may not be sufficient to detect them. In addition, activities involving real business decisions can be considered legal and legitimate, making it more difficult to identify as earnings management. (Cohen & Zarowin, 2010)..

The results of this study cannot support agency theory which explains that good internal control will produce reliable financial reports so as to suppress real earnings management. Because even though the company has good control or not, it does not rule out the possibility that managers will not carry out real earnings management. This is due to the nature of real earnings management itself which is difficult to detect by internal and external auditors.

This finding is inconsistent with the findings of (Chi & Gooda, 2024; Wali & Masmoudi, 2020) which show a significant negative relationship. which shows a significant negative relationship, which indicates that high-quality internal control can limit real earnings management. However, the findings in this study are in line with the findings of (Ridanti & Suryaningrum, 2021) which shows insignificant results from the relationship between internal control and real earnings management, where in this study it is explained that the problem of information asymmetry, which is a moral hazard (where managers can take actions outside the knowledge of the principal that violate the contract), can be resolved in one direction and the quality of good internal control must be accompanied by increased supervision of earnings management actions, not only as a form of formality to comply with existing regulations.

The Effect of Debt Risk on Real Earnings Management

From testing the second hypothesis (H2), the results show a probability value of 0.5315 which is greater than 0.05 with a regression coefficient of 0.013239. This shows that debt risk has no effect on real earnings management. These results indicate that there is no influence on the relationship between real earnings management and debt risk in *non-cyclical consumer* companies in Indonesia, which means that the second hypothesis (H2) is rejected. It can be seen from the mean value of the test results that the value of debt risk in the *consumer non-cyclicals* companies sampled has a low value, meaning that the company is in a healthy condition so that managers will not think about doing earnings management. Because basically the decision on the manager's financial strategy will have an impact on risk management and earnings management (Zang, 2012). (Zang, 2012).

The results of this study cannot support signal theory which states that companies with low debt risk will report their financial statement information transparently and companies with high debt risk will tend to manipulate their financial statements, but this study shows that companies prefer to maintain investor confidence by reporting reliable company financial reports so that the company's long-term reputation remains good in the eyes of creditors and investors rather than doing real earnings management which can reduce investor confidence and drop the reputation that has been built by investors. This finding is not in accordance with the findings of (Chi & Gooda, 2024) which shows a significant negative relationship, which indicates that high debt risk can suppress the occurrence of real earnings management.

The Effect of CEO Education on Real Earnings Management

From testing the third hypothesis (H3), the results show a probability value of 0.6317 which is greater than 0.05 with a regression coefficient of 0.010294. This shows that CEO education has no effect on real earnings management. These results indicate that there is no effect on the relationship between real earnings management and CEO education in *non-cyclical consumer* companies in

Indonesia, which means that the third hypothesis (H3) is rejected. The lack of effect on the level of CEO education is because the *consumer non-cyclicals* sector companies do not provide a benchmark for the education level of the selected CEO, this is because the experience and skills of the selected CEO are prioritized over the level of education. Although formal education provides a strong theoretical basis, practical skills and knowledge gained through experience by going directly to the field are more decisive in making business decisions, including real earnings management.

The results of this study are not in line with the theory of *Upper Echelon Theory* which reveals that the level of education of top management can have an influence on the selection of strategies and outcomes in the company. Because companies prioritize the experience of the CEO, the high or low level of CEO education has no effect on real earnings management activities carried out by company managers. This finding is not in accordance with the results of research (Chi & Gooda, 2024) which shows significant negative results, which indicate that companies with highly educated CEOs can limit real earnings management activities.

4. CONCLUSION

This study aims to determine the effect of internal control, debt risk, and CEO education on real earnings management with BIG 4, ROA, and OCF as control variables in *consumer non-cyclicals* companies listed on the Indonesia Stock Exchange in 2021 - 2023. From the residual results of real earnings management, on average, *consumer non-cyclicals* companies carry out real earnings management in the sales and production costs section, this is indicated by the average residual value of these costs. From hypothesis testing, it is found that internal control, debt risk, and CEO education have no effect on real earnings management in *consumer non-cyclicals* companies. Real earnings management in *consumer non-cyclicals* companies is positively influenced by the ROA control variable. This means that high company research puts pressure and incentives on management to continue to display good financial performance, which can encourage managers to carry out real earnings management so that financial figures, including profits and ROA, still look positive in the eyes of shareholders and the market.

The limitations of this study are the limited relevant research that supports the findings in this study because there are not many similar studies that examine the same variables, especially in Indonesia and this study only uses companies engaged in one sector, namely the *consumer non-cyclicals* sector so that the sample of this study is limited, the small number of companies that make complete annual reports makes the number of samples obtained also limited. Due to differences in the characteristics and conditions of other companies, there is a possibility of different results.

5. REFERENCES

- Achyani, F. (2019). The Determinant Accountability Of Village Funds Management (Study in the Villages in Wonogiri District). *Riset Akuntansi Dan Keuangan Indonesia*, Vol 4, No 2 (2019), 118–135.
- Agustia, Y. P., & Suryani, E. (2018). The Effect of Company Size, Company Age, Leverage, and Profitability on Earnings Management (Study of Mining Companies

Listed on the Indonesia Stock Exchange for the 2014-2016 Period). *ASET Journal (Accounting Research)*, 10(1), 71-82. <https://doi.org/10.17509/jaset.v10i1.12571>

Anagnostopoulou, S. C., & Tsekrekos, A. E. (2017). The effect of financial leverage on real and accrual-based earnings management. *Accounting and Business Research*, 47(2), 191-236. <https://doi.org/10.1080/00014788.2016.1204217>

Andira, M. H., & Ratnadi, N. M. D. (2022). Educational Background of the Board of Directors, Board of Commissioners, Audit Committee and Real Earnings Management Practices. *E-Journal of Accounting*, 32(1), 3468. <https://doi.org/10.24843/eja.2022.v32.i01.p11>

Arisa, F. & S. I. G. (2022). The Effect of Chief Executive Officer Characteristics on Real Earnings Management in Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2015-2019 Period. *Journal of Business and Accounting*, 21.

Cahyaningrum, N., Gunawan, J., Anis, I., & Accounting Trisakti University, M. (2022). Financial Distress and Internal Control on Earnings Management with Managerial Ownership as Moderation. *E-Journal of Accounting*. <https://doi.org/10.24843/EJA.2022.v>

Chi, G., & Gooda, A. R. (2024). Internal control, debt risk, CEO education and earnings management evidence from China. *Journal of Financial Reporting and Accounting*, 22(1), 52-78. <https://doi.org/10.1108/JFRA-05-2023-0237>

Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2-19. <https://doi.org/10.1016/j.jacceco.2010.01.002>

Fan, J. P. H., Huang, J., & Zhu, N. (2013). Institutions, ownership structures, and distress resolution in China. *Journal of Corporate Finance*, 23, 71-87. <https://doi.org/10.1016/j.jcorpfin.2013.07.005>

Ghozali & Ratmono. (2017). *Multivariate Analysis and Econometrics Theory, Concepts, and Applications with Eviews 10*. Diponegoro University Publishing Agency.

Hadi, F., & Afriyenti, M. (2022). The Effect of Internal Control and External Audit on Accrual and Real Earnings Management. In *Journal of Accounting Exploration (JEA)* (Vol. 4, Issue 1). Online. <http://jea.ppj.unp.ac.id/index.php/jea/index>

Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. In *Source: The Academy of Management Review* (Vol. 9, Issue 2).

Hamza, S. E., Bannouri, S., Hamza, S. E., & Bannouri, S. (2015). The detection of real earnings management in MENA countries: the case of Tunisia. In *Afro-Asian J. Finance and Accounting* (Vol. 5, Issue 2).

Hastuti, R., & Timming, A. R. (2021). An inter-disciplinary review of the literature on mental illness disclosure in the workplace: Implications for human resource management. *The International Journal of Human Resource Management*, 32(15), 3302-3338.

Jamaliyah, I. (2020). *The Effect of Female Ceo on the Quality of Financial Statements: Risk Preference as Moderator* (Vol. 22, Issue 2). <http://jurnaltsm.id/index.php/JBA>

Liu, W. P., & Huang, H. W. (2020). Auditor realignment, voluntary SOX 404 adoption, and internal control material weakness remediation: Further evidence from U.S.-listed foreign firms. *International Business Review*, 29(5). <https://doi.org/10.1016/j.ibusrev.2020.101712>

Manopo, S., & Nugrahant, Y. W. (2023). The Role of Political Connections in Moderating the Effect of Board Characteristics on Real Earnings Management. *E-Journal of Accounting*, 33(8). <https://doi.org/10.24843/eja.2023.v33.i08.p05>

Mostafa, W. (2017). The impact of earnings management on the value relevance of earnings: Empirical evidence from Egypt. *Managerial Auditing Journal*, 32(1), 50-74. <https://doi.org/10.1108/MAJ-01-2016-1304>

Napitulu, runggu. (2021). *Business Research Techniques and Data Analysis with SPSS - STATA - EVIEWS* (1st ed.). MEDANTERA.

Nuraini Elita, I. L. (2024). The Effect of Information Asymmetry, Earnings Management, and Intellectual Capital Disclosure on the Cost of Equity (Empirical Study of Pharmaceutical Sub-Sector Companies Listed on the Indonesia Stock Exchange (IDX) for the Period 2017 - 2021). *Scientific Journal of Economics and Management*, 2. <https://doi.org/https://doi.org/10.61722/jiem.v2i1.665>

Nurmayanti, P. (2021). Ceo Quality and Real Earnings Management: Does Firm Life Cycle Matter? Evidence from Indonesia. In *Journal of Al-Iqtishad Edition* (Vol. 17).

Ohlson, J. A. (1980). Financial Ratios and the Probabilistic Prediction of Bankruptcy. In *Journal of Accounting Research* (Vol. 18, Issue 1).

Ridanti, P. P., & Suryaningrum, H. (2021). The Effect Of Financial Distress, Internal Control, And Debt Structure On Earnings Management In Companies Registered In Indonesia Stock Exchange. *Audit and Accounting Information Systems*, 5(3). <https://doi.org/10.36555/jasa.v5i2.1630>

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335-370. <https://doi.org/10.1016/j.jacceco.2006.01.002>

Sirat, A. F. (2015). *Study of Information Asymmetry in Budget Allocation Determination*.

Skaife, H. A., Collins, D. W., Kinney, Jr., W. R., & LaFond, R. (2011). The Effect of SOX Internal Control Deficiencies and Their Remediation on Accrual Quality. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.906474>

Subekti, I. (2012). Accrual And Real Earnings Management: One Of The Perspectives Of Prospect Theory. In *Journal of Economics* (Vol. 15, Issue 3).

Sugiyono. (2015). *Quantitative, qualitative and R&D research methods*. alfabeta.

Sulhia, B. A. (2021). *Analysis of the Effect of Female Executive on Earnings Management (Study of Manufacturing Companies Listed on the Indonesia Stock Exchange 2016-2018)* (Vol. 1, Issue 3).

Tan, D., Bilal, Gao, S., & Komal, B. (2020). Impact of carbon emission trading system participation and level of internal control on the quality of carbon emission disclosures: Insights from Chinese state-owned electricity companies. *Sustainability (Switzerland)*, 12(5), 1-14. <https://doi.org/10.3390/su12051788>

Trisnawati, M. (2022). *Corporate Governance and Real Earnings Management in Manufacturing Companies on the Indonesia Stock Exchange (IDX)*. 5(2).

Wali, S., & Masmoudi, S. M. (2020). Internal control and real earnings management in the French context. *Journal of Financial Reporting and Accounting*, 18(2), 363-387. <https://doi.org/10.1108/JFRA-09-2019-0117>

Wally, S., & Baum, J. R. (1994). Personal and Structural Determinants of the Pace of Strategic Decision Making. In *Source: The Academy of Management Journal* (Vol. 37, Issue 4).

Wardani, M. K. (2019, October). The Effectiveness of Internal Control System and Role of Internal Audit on Local Government Performance. In *Journal of International Conference Proceedings* (Vol. 2, No. 2, pp. 112-122)

Wiersema, M. F., & Bantel, K. A. (1992). Top Management Team Demography and Corporate Strategic Change. In *Source: The Academy of Management Journal* (Vol. 35, Issue 1).

Yasar, B., Martin, T., & Kiessling, T. (2020). An empirical test of signaling theory. *Management Research Review*, 43(11), 1309-1335. <https://doi.org/10.1108/MRR-08-2019-0338>

Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *Accounting Review*, 87(2), 675-703. <https://doi.org/10.2308/accr-10196>

Zhou, M., Chen, F., & Chen, Z. (2021). Can CEO education promote environmental innovation: Evidence from Chinese enterprises. *Journal of Cleaner Production*, 297. <https://doi.org/10.1016/j.jclepro.2021.126725>