The effect of good CG to the accrual and real earnings management on the firm value incorporating the before and after pandemic review

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ABSTRACT

The aim of this study was to examine the moderating effect of good corporate governance (CG) on the relationship between accrual earnings management (AEM) and real earnings management (REM) and firm value (FV). The current approach employed the discretionary accruals model, which relied on companies' data listed on the Jakarta Islamic Index. The study results suggest that the incorporation of discretionary accruals in the calculation of AEM did not yield a statistically significant effect on the FV. The adverse effects of REM on FV are significant when considering the discretionary cash flow operations, discretionary production, and discretionary expense. The objective of this study is to analyze the influence of CG on the association between earnings management (EM) and FV. The present study aims to examine the moderating influence of institutional ownership, independent commissioners, audit committees, and the board of directors on the impact of AEM and REM on FV. The results indicate that the influence of CG on the relationship between AEM and REM, as mediated by discretionary cash flow operations, is not significant in terms of FV. However, CG does have a moderating effect on the relationship between REM and FV, specifically through discretionary production and discretionary expense.

Keywords: corporate governance, accrual earnings management, real earnings management, FV

1. Introduction

A. Background research without considering pandemic

The examination of EM holds a prominent position within the domain of scholarly research in the field of accounting. The utilization of sophisticated statistical techniques and the dependence on comprehensive quantified datasets are commonly observed in academic research. However, a notable deficiency exists in the existing body of literature concerning the pragmatic execution of EM, as highlighted by Brennan (2021). The research conducted by Loureiro and Silva (2022) aims to examine the potential increase in crash risk associated with EM following the cross-delisting of firms that have been removed from prominent stock exchanges in the United States. Loureiro and Silva (2022) observed that the act of manipulating earnings has a greater positive impact on the probability of a stock price crash following cross-delisting, as compared to a group of companies that continue to maintain cross-listing. Trinh et al. (2023) have presented another result which suggests that the relationship between institutional ownership and earnings quality is contingent upon the regulatory and institutional frameworks of different countries, in addition to GCG measures that enhance the quality of financial earnings.

According to Amin and Cumming (2021), the existing body of evidence indicates a strong association between enhanced institutional and regulatory frameworks and enhanced financial reporting practices among corporations. This correlation ultimately leads to the successful mitigation of the REM (Amin & Cumming, 2021). In order to offer empirical elucidation regarding the impact of two incentives, specifically entrenchment and signaling, on the substitution between real and accruals-based EM, the research conducted by Attig et al. (2020) examines their individual effects on valuation. It was noted that both categories of incentives exert a detrimental impact on the prospective valuation of family-owned enterprises. The study conducted by Attig et al. (2020) presents results that are consistent with expected results, suggesting that the adoption of EM practices in family-owned businesses is influenced by the degree of investor protection at the national level and the firm's need for external funding. According to the results presented by Kouaib and Lacombe (2023), the existing body of evidence indicates that the implementation of AEM/REM practices plays a role as a mediator, to some extent, in the relationship between CEO overconfidence and the subsequent performance of the organization. The results of this research could have implications for accounting regulatory entities, as the level of chief executive officers (CEOs) overconfidence has the capacity to impact future performance through AEM and REM. The increased scrutiny of AEM does not exclude the exploration of alternative modalities. According to Kouaib and Lacombe (2023), the strategic preferences of CEOs are influenced by their overconfidence, which can result in substantial costs for investors. According to the research conducted by Li et al. (2020), companies that face financial difficulties tend to increase their utilization of AEM strategies, while simultaneously displaying a decreased inclination towards REM practices. The relationship between financial distress and EM is influenced by the presence of internal control, which acts as a moderator by constraining both AEM and REM. The study conducted by Li et al. (2020) contributes to the existing body of knowledge by providing additional insights into the manipulation of earnings and the utilization of internal control mechanisms within financially distressed companies, particularly within the context of emerging markets. The involvement of institutional investors in on-site visits holds the capacity to strengthen CG and alleviate accrual-based EM According to Wu et al. (2023), it has been established that the implementation of site visits can serve as an efficacious strategy for reducing occurrences of corporate fraud.

According to the results of Lara et al. (2020), the implementation of the regulation resulted in a decrease in accruals-based EM and an increase in REM among the treated firms. Furthermore, these companies exhibit a reduced probability of being classified as marginal or habitual violators of earnings benchmarks. The relevance of earnings in the evaluation and analysis of fair value, along with the detectability of selectively cautious accounting decisions, makes their outcomes significant for investment professionals (Lara et al., 2020). According to the results of Alzoubi's (2018) study, various factors such as auditor tenure, size, specialization, independence, and the extent of debt financing (particularly low levels of debt) have been shown to have a mitigating influence on the probability of experiencing EM. Consequently, this phenomenon results in an enhancement of the overall standard of financial reporting. Elevated levels of debt are anticipated to augment the risk associated with EM. The implications of the study's results hold significance for policymakers in Jordan and other countries who are striving to establish a comprehensive and reliable auditing framework (Alzoubi, 2018). Ding et al. (2018) have noted that companies that have political affiliations demonstrate improved accounting performance. The results suggest that companies with political affiliations demonstrate a higher inclination to participate in authentic activities that seek to manipulate their earnings, in comparison to companies that do not have such affiliations. Furthermore, the influence of regional economic development affects the moderation of the relationships between political affiliation and both REM and firm performance. According to Ding et al. (2018), the study suggests that REM plays a crucial role in mediating the association between political affiliation and firm performance specifically for privately held companies. The research conducted by González-Sánchez et al. (2023) provides an initial contribution to the understanding of how socially responsible corporations engage in performance management within the specific domain of search engine optimization. Nevertheless, it is crucial to acknowledge that their research is subject to specific constraints. Despite its inherent limitations, this study represents a noteworthy progression in the analysis of EM, as it explores its relationship with corporate social responsibility (CSR) and SEO, which have previously been studied independently. The investigation of whether socially responsible companies employ environmental management tactics before pursuing financing through SEO operations in the capital market is a subject of scholarly and analytical significance. The study conducted by González-Sánchez et al. (2023) exhibits the possibility of generalizing their results to different contexts or markets, given the implementation of suitable adjustments.

El Diri et al. (2020) have noted a correlation between high market concentration and increased utilization of both AEM and REM by companies, in comparison to their counterparts operating in markets with lower levels of concentration. The results of their study offer potential benefits for regulators aiming to enhance the legitimacy of GCG in markets characterized by significant concentration (El Diri et al., 2020). Given that the moderating effect of firm characteristic variables is not significant, it can be concluded that the variation in governance structures does not play a major role in explaining the observed behavioral differences. The observed disparities, as indicated in the research conducted by Chen et al. (2020), can be attributed to the prompt reaction of general partners to changes in the market. According to Chen et al. (2020), master limited partnerships encounter considerable pressure to sustain a consistent flow of earnings and guarantee stable cash distributions to their unitholders. The research conducted by Kuo et al. (2021) examines the association between enterprise risk management (ERM) and CSR, as well as the influence of managerial confidence and REM on this association. The results suggest that companies with a higher level of expertise in ERM are more likely to engage in CSR initiatives. The examination of the relationship between managerial confidence and ERM indicates that companies led by CEOs who demonstrate higher levels of confidence and engage in manipulative practices related to real activities are more likely to have increased levels of CSR inputs. The influence of managerial confidence on corporate policies is particularly evident in its role in mitigating the overall risk associated with CSR. The researchers discovered that CEOs who demonstrate confidence and hold a larger number of shares display a higher level of alignment with their respective companies. As a result, there is a greater propensity for them to participate in CSR endeavors that are specifically designed to enhance the standing of their organizations, as indicated by Kuo et al. (2021). The insufficiency of minority shareholder protection in many developing countries poses a significant obstacle to the advancement of capital markets and economic development. Ge et al. (2022) conducted a study to investigate the impact of CSISC shareholding on the phenomenon of earnings management. The level of influence that minority shareholders can exert over the CG of publicly traded companies is still ambiguous. The phenomenon described above has been documented in organizations characterized by inadequate internal or external CG mechanisms, as well as in organizations lacking political affiliations (Ge et al., 2022). The research conducted by Nazir and Afza (2018) examines the effects of discretionary earning management (DEM) on both current and future FV. This investigation aims to determine whether DEM is a beneficial practice or if it is driven by opportunistic motives. The adverse behavior exhibited by corporate managers in regards to value destruction, as witnessed within the DEM framework, exerts a detrimental moderating influence on both CG and FV. According to Nazir and Afza (2018), corporations that partake in earnings manipulation demonstrate insufficient execution of their CG structure, leading to a reduction in fair value. Liu and Lu (2007) have identified evidence of tunneling for each case. According to Liu and Lu (2007), their empirical results suggest that the presence of agency conflicts between controlling shareholders and minority investors plays a noteworthy role in explaining the emergence of EM in China's listed companies. However, it is important to note that alternative explanations cannot be completely disregarded. According to the research conducted by Siregar and Utama (2008), it was found that companies listed on the Jakarta Stock Exchange (JSE) tend to display a predilection for the adoption of effective EM practices. The evidence presented challenges the widely held belief that EM practices in Indonesia are primarily motivated by opportunism. The selection of EM strategies is significantly influenced by the ownership structure of a family. Organizations that have a substantial percentage of family ownership and non-business groups tend to display a higher inclination towards selecting efficient environmental management practices when compared to other types of firms. The existing body of evidence pertaining to the impact of institutional ownership, firm size, and CG practices on the nature of emerging markets is inconclusive (Siregar & Utama, 2008). Evidence from Indonesia suggests that managers' decision to engage in earnings management is influenced by high levels of free cash flow and employee differentiation, as indicated by the research conducted by Bukit and Nasution (2015). Therefore, it is crucial to ensure that corporations achieve exceptional performance by effectively allocating their cash flow towards profitable endeavors, thereby mitigating the risk of engaging in misconduct and manipulating financial outcomes. Furthermore, the adoption of reduced EM practices would lead to an increased association between financial and non-financial indicators. The monitoring and control of earnings manipulation in firms, especially those with surplus cash and high employee differentiation, are significantly influenced by the inclusion of institutional investors, independent directors on the board of directors, and independent directors on the audit committee (Bukit & Nasution, 2015).

In line with the research conducted by Kuo et al. (2021), the study conducted by Bozzolan et al. (2015) investigates the potential influence of a company's CSR orientation on its reporting incentives, particularly with respect to the equilibrium between REM and AEM. Furthermore, by utilizing existing academic literature that explores the relationship between legal enforcement and the equilibrium between AEM and REM, we aim to explore the potential moderating effect of CSR orientation on this connection. There is a notable observation indicating that companies that prioritize CSR tend to exhibit a greater inclination towards adopting an approach known as AEM rather than REM. Moreover, the results indicate that in countries with strong legal systems, companies that prioritize CSR show significantly lower incentives to engage in AEM compared to REM, in contrast to firms with a low CSR focus. The results align with the hypothesis that companies that prioritize CSR (CSR) are less likely to utilize the more complex and less overt EM technique, specifically the one that involves modifying the REM. This study presents supplementary evidence to support the proposition that firms with a focus on CSR are more inclined to relinquish their investments in REM as opposed to AEM, due to the negative impact it has on their future performance. The existing body of evidence suggests that a CSR (CSR) focus acts as a constraint on REM, thereby enabling the creation of value for multiple stakeholders (Bozzolan et al., 2015). Hence, Zhang et al. (2023) propose that firms should give precedence to addressing the prospective negative consequences in the long run that may arise from the influence exerted by analysts on earnings. There is a prevailing recommendation to consistently strive towards augmenting the consciousness surrounding environmental governance and the extent of environmental disclosure, all the while maintaining a delicate equilibrium between economic and environmental achievements. It is anticipated that this approach will enhance the capability for achieving sustainable development. The results of Zhang et al. (2023) offer empirical evidence in favor of the proposition that organizations can mitigate the adverse effects of analysts' pressure on environmental disclosure by implementing changes to their CG structure. Another constraint that must be considered is the assumption that having an affiliation with XCORP bank inherently involves a substantial level of CG. The presence or absence of a bank in the XCORP index does not necessarily determine the quality of its governance practices, as it is conceivable for a bank to exhibit superior governance practices irrespective of its inclusion in said index. The primary aim of this research is to examine the market's reaction to announcements pertaining to the sale of non-performing loans (NPLs). Therefore, it is more rational to consider the investor perceptions of XCORP as an indicator of the bank's CG condition rather than its factual state (Pirgaip & Uysal, 2023). The primary objective of this empirical study is to examine the influence of disclosure pertaining to environmental, social, and governance (ESG) factors on the occurrence of financial irregularities among companies that are publicly traded in China. Furthermore, the present study aims to investigate the moderating influence of the intensity of both internal and external supervision. Yuan et al. (2022) underscore the positive influence of environmental, social, and governance (ESG) information disclosure, which results in the improvement of internal control, public scrutiny, and government regulation in real-world contexts. According to Yuan et al. (2022), it can be inferred that the disclosure of ESG information functions as an additional mechanism to address and reduce instances of financial misconduct.

B. Background research development during and after COVID-19 pandemic

According to the research by Aljughaiman et. al. (2023), corporations were incentivized to enhance their earnings to appeal to potential investors. Regarding this matter, it is important to note that the existence of such conduct necessitates the awareness of standards setters that a mere collection of independent accounting standards is inadequate in curtailing the distortion of financial data arising from the practice of earnings management. One potential constraint of their study is that the inferences are based on data solely from publicly traded firms in China. The variances in CG and accounting standards between emerging and developed nations may potentially influence the EM practices of emerging markets, given the differing national circumstances (Aljughaiman et. al., 2023). The study by Hsu and Yang (2022) examines the ameliorative function of CG in relation to the standard of financial reporting amidst the COVID-19 crisis. Through an analysis of the authentic EM practices of corporations, it has been observed that the standard of financial reporting has decreased amidst the pandemic. One possible explanation for this phenomenon is that firms engage in REM as a means of mitigating potential adverse responses from investors. The occurrence of increased REM activities during the pandemic necessitates a more cautious approach by investors and lenders when analyzing financial reporting outcomes. During the pandemic, it is advisable for companies to enhance their corporate governance, particularly with respect to board size, to ensure the provision of high-quality financial reporting (Hsu & Yang, 2022). The study by Graham et. al. (2023) sheds light on the inadequacy of their vulnerable accountability systems during times of significant disruption. The proposition posits that customary mechanisms of corporate responsibility are insufficient in their responsiveness, as they tend to be reactive rather than proactive. The prioritization of profit and efficiency takes precedence over the establishment of systemic resilience and robustness. Governments provide reinforcement, but due to economic and funding constraints, they may be limited in their ability to implement the most stringent penalties available. The system disperses corporate responsibility in favor of the corporate imagination. The assertion is that a system is incapable of generating change from within, given that it has effectively assimilated and disseminated the effects of a significant crisis as the COVID-19 pandemic (Graham et. al., 2023).

The global economy experienced significant disruptions as a result of the pandemic, leading to a reduction in firms' financial resources. Hence, it is imperative for organizations to possess resilience in order to effectively address the challenges arising from the crisis induced by the COVID-19 pandemic. The results of Srivastava et. al. (2022) research indicate that the adoption of socially responsible practices by firms can serve as a beneficial factor in mitigating the impact of the COVID-19 crisis. Specifically, such practices can facilitate improved access to external capital. The capability fosters the ability to withstand and recover from unexpected events, while also promoting the acquisition of crucial assets necessary for enduring the negative consequences of said events. They emphasize the importance of CSR for organizations. During times of crisis, stakeholders' risk perception towards firms is reduced by the responsible behavior and reputation of said firms (Srivastava et. al., 2022). The COVID-19 pandemic has had a significant adverse effect on the worldwide economy. It is possible that there could be an upswing in firm performance during the second quarter of 2020, as there are indications of market improvement. The ongoing pandemic has had a negative impact on crucial sectors such as tourism, transportation, retail, catering, and entertainment. Additionally, the research proposes that the nation should extend support to industries or enterprises that have been significantly impacted by the ongoing pandemic. It is recommended that the government implement policies to provide support for the firms that have been most severely impacted by the pandemic, in order to facilitate their successful recovery. It is recommended that firms devise novel strategies to revitalize their business operations in the aftermath of the COVID-19 pandemic. Restoring the operations of firms in the post-pandemic era is of utmost significance (Makni, 2023).

The study's results by Clark et. al. (2021) is expected to be of considerable interest to equity investors and hospitality managers. They pointed out that conventional accounting and financial metrics are more closely associated with the market- and risk-adjusted cumulative abnormal return reductions observed in the examined hospitality firms than more obscure variables like environmental, social, and governance (ESG) ratings (Clark et. al., 2021). The potential for greater diversification between green and brown assets implies that investors who prioritize environmentally-friendly investments may be more likely to adhere to their investment strategies and mitigate financial risks associated with brown assets, particularly during periods of economic fragility such as the COVID-19 pandemic. It may be imperative to implement policy intervention to establish sufficient incentives for both the demand and supply facets, thereby augmenting the market for environmentally-friendly securities (Agoraki et. al., 2023). The study by El Khoury et. al. (2022) provides a comprehensive examination of the relationship between ESG factors and financial performance. Their results of offer valuable insights to both academic researchers and corporate decision-makers. The existing literature suggests that effective corporate management and transparent disclosure of ESG factors are positively associated with enhanced financial performance. However, their analysis indicates that this assertion holds true only for accounting performance and not for market performance. The proposition implies that investors could potentially exhibit sensitivity towards factors, such as the sustainable investing approach implemented by corporations. The significance of ESG metrics cannot be undermined; however, their measurement in the absence of a corresponding strategy appears to be an ineffectual approach. In addition, it is imperative for them to consider various mediating factors, such as innovation and operational efficiency metrics, which may have a positive impact on corporate performance when integrated with responsible investment (El Khoury et. al., 2022).

2. Method

The survey covers companies included in the Jakarta Islamic Index between 2014 and 2018. This study is descriptive and causal in nature and aims to determine the existence and relationship of variables in real profit management with accrued profit management and FV variables. The methods used for this research are quantitative studies, which involve the study of specific samples or populations, data collection, and quantitative/statistical data analysis aimed at validating a given hypothesis.

The data used for this study are company financial statements obtained from www.idx.co.id on the Jakarta Islamic Index between 2014 and 2018, and year-end share prices and shares outstanding from https. A secondary data source that contains https://finance.yahoo.com. The data required for this study includes the company's income statement, balance sheet, cash flow statement, financial statement notes, and period-end prices and issuances to measure the FV. number of outstanding shares. The data collection methods used in this study are documentation methods including financial statements, stock price listings, number of shares outstanding, company records related to required data, and literature research data collection techniques.

The study population consists of all companies indexed on the Jakarta Islamic Index (JII) such listed in **Table 1**, but the sampling technique used is targeted sampling, and no object must be eligible for sampling. Certain criteria are required. Jakarta Islamic Index (JII) Sample selection criteria for companies include: consistency of indexing on the Jakarta Islamic Index from 2014 to 2018; publication of consistent financial statements during the period; use of, positive net income, positive net cash flow and disclosure of information about the institutional ownership structure, independent board, audit committee and board of directors

Table 1. Firm sample Determination

INFORMATION	NUMBER OF SAMPLES
Companies indexed in the *Jakarta Islamic Index* during the period 2014-2018.	30
Companies that are not consistently indexed in the *Jakarta Islamic Index* during the period 2014-2018.	-15
Companies indexed in the *Jakarta Islamic Index* do not publish financial statements consistently for the 2014-2018 period.	0
Companies indexed in *the Jakarta Islamic Index* do not present financial statements in currency units rupiah consistently during 2014-2018.	-3
The company had no positive profit and net cash flow during 2014-2018.	-3
Financial statements contain incomplete data in accordance with research variables.	0
Number of Company Samples	**9**
Number of Company Observations in 2014-2018	**45**

This article describes the research variables and operational definitions used in the study. The study variables used are independent, dependent and moderator variables. The independent variables are accrued profit management and real profit management, which cause or affect changes in the dependent variable's FV. Moderator variables are good controls and can strengthen or weaken the relationship between the independent and dependent variables.

Step 1 - independent variable

The variables considered in this study encompass:

X_1 = AEM

X_2 = REM

Y = FV

Z_1 = Institutional Ownership

Z_2 = Independent Board of Commissioners

Z_3 = Audit Committee

Z_4 = Board of Directors

a. Accrual earning management

This study employs the Modified Jones Model, an empirical model devised by Kothari et. al. (2005), to identify instances of EM facilitated by discretionary accruals. Calculate the total accrual value using the provided formula.

$$TA_{it} = N_{it} - CFO \tag{1}$$

The total value of accruals is determined by the coefficient values $\beta_1, \beta_2, \beta_3$ in the following equation:

$$TA_{it}/A_{it-1} = \beta_1(1/A_{it}-1) + \beta_2(\Delta Rev_{it}/A_{it-1}) + \beta_3 (PPE_{it}/A_{it-1}) + \beta_4 ROA_{it} + e \tag{2}$$

Calculate the value of non-discretionary accruals with the following equation:

$$NDA_{it} = \beta_1(1/A_{it-1}) + \beta_2(\Delta Rev_{it}-\Delta Rec_{it}/A_{it}-1) + \beta_3(PPE_{it}/A_{it}-1) + \beta_4 ROA_{it} + e \tag{3}$$

Calculate the value of discretionary accruals with the following equation:

$$DA_{it} = TA_{it}/A_{it-1} - NDA_{it}$$

Where:

TA_{it}	= Total accruals of company-*i* in period *t*
N_{it}	= Net profit of company-*i* in period *t*
CFO_{it}	= Company- *i* operating cash flow in period *t*
β	= Regression coefficient
A_{it-1}	= Total assets of company-*i* in period *(t-1)*
ΔRev_{it}	= Revenue of company-*i* in period *t* minus revenue of period *(t-1)*
ΔRec_{it}	= Receivables of company-*i* in period t minus receivables *(t-1)*
PFE_{it}	= Fixed assets (plant, property, and equipment) of company-*i* in period *t*
NDA_{it}	= non-discretionary accrual of company-*i* in period-*t*
DA_{it}	= Discretionary accrual of company-*i* in period *t*
ROA_{it}	= Return on assets of company-*i* in period *t*
e	= Error

b. Real earning management

Another study by Roychowdhury (2006) identified three distinct methods for implementing REM.

(1) The calculation of the management of real earnings through discretionary cash flow is determined by the following formula:

$$CFO_{it}/A_{it-1}= \alpha_0 + \alpha_1 (1 / A_{it}-1) + \beta_1(S_{it} / A_{it}-1) + \beta_2 (\Delta S_{it} / A_{it}-1) + e \qquad (4)$$

$$ABCFO = CFO_{it}/A_{it-1} \text{ (before estimation) - } CFO_{it}/A_{it-1} \text{ (estimation result)}$$

Where:

α_0	= Constant
$\alpha_{1,} \beta$	= Regression coefficient
S_{it}	= Sales of company- i in period t
ΔS_{it}	= Difference between sales of company - i period t with sales of period *(t-1)*

(2) The calculation of real profit management through discretionary production costs can be determined by employing the following formula:

$$PROD_{it}/A_{it-1}=\alpha_0+\alpha_1(1/A_{it-1})+\beta_1(S_{it}/A_{it-1})+\beta_2(\Delta S_{it}/A_{it-1})+\beta_3(\Delta S_{it-1}/A_{it-1})+e......(2)$$

$$ABPRD = PROD_{it}/A_{it-1} \text{ (before estimation) - } PROD_{it}/A_{it-1} \text{(estimation result)}$$

Where:

$PROD_{it}$	= Production cost of company- i in period t, with $PROD_{it} = COGS_{it} + \Delta INV_{it}$)
ΔS_{it-1}	= The difference between company sales- i period (t-1) with sales period (t-2)

(3) The calculation of REM through discretionary expenses is determined by employing the following formula:

$$DISEXP_{it} / A_{it-1} = \alpha_0 + \alpha_1 (1 / A_{it-1}) + \beta (S_{it-1} / A_{it-1}) + e...........(3)$$

$$ABDisexp = DISEXP_{it} / A_{it-1} \text{ (before estimation) - } DISEXP_{it} / A_{it-1} \text{ (estimation result)}$$

Where:

$DISEXP_{it}$	= *Discretionary expense* company- i in period t

Step 2 - dependent variable

The variables considered in this study encompass:

Q	= FV
EMV	= closing price of shares x number of outstanding shares
D	= book value of total debt
EBV	= book value of total assets

Step 3 - moderating variable

This study employs institutional ownership, independent commissioners, audit committees, and boards of directors as proxies for measuring good CG.

The operational definition of the independent variable is: Accrued profit management refers to the manipulation of corporate profits through accounting methods, policies and estimates used to record transactions. The Modified Jones Model is used to determine revenue management through discretionary accrual using specific formulas for determining prescribed total value, non-discretionary accrual value, and discretionary accrual value. Real profit management, on the other hand, refers to manipulating a company's operations during an accounting period using three methods, including arbitrary cash flows.

The moderator variable, GCG, is defined as institutional ownership, the presence of an independent board, audit committee, and board. GCG can reduce the impact of profit management on FV. Stakeholders such as independent commissioners, audit committees, and boards can undermine profit management measures, and high levels of institutional ownership can undermine profit management.

Data analysis is an important part of any research study. Among the various techniques used in data analysis, two important techniques are descriptive statistics testing and classical hypothesis testing. Descriptive statistics tests are used to describe sample data and include mean, minimum, maximum, and standard deviation. On the other hand, traditional assumption tests are used to determine whether an estimated model satisfies the assumptions that ordinary least squares (OLS) must satisfy.

Classical hypothesis tests include several sub-tests such as normality tests, heteroscedasticity tests, autocorrelation tests, and multicollinearity tests. The normality test tests whether the residual variables in a regression model are normally distributed. The heteroscedasticity test is used to determine whether there is variance inequality between the residuals of one observation and another. Autocorrelation tests aim to determine whether there is a correlation between the residuals of a linear regression model. A multicollinearity test tests whether a regression model detects correlations between independent variables.

Perform normality, heteroscedasticity, autocorrelation, and multicollinearity tests to detect deviations from traditional assumptions. Normality tests can be performed using nonparametric statistical tests such as the Kolmogorov-Smirnov (KS) test. Heterogeneous distribution tests can be performed using the Glejser test. Autocorrelation tests shown in **Table 2** and can be performed using the Durbin-Watson test. A multicollinearity test can be performed using tolerance and variance inflation factor (VIF) values. Good regression models in data processing are free of autocorrelation, heteroscedasticity, and multicollinearity.

Decision making on whether there is autocorrelation is as follows:

Table 2 Autocorrelation Decision Making

NULL HYPOTHESIS	DECISION	IF
No positive autocorrelation	Reject	$0 < d < dl$
No positive autocorrelation	*No decision*	$dl < d < du$
No negative autocorrelation	Reject	$4 - dl < d < 4$
No negative autocorrelation	*No decision*	$4 - du \leq d \leq 4 - dl$
There is no positive or negative autocorrelation	Accepted	$du < d < 4 - du$

Multiple regression analysis is a statistical technique used to predict the value of a dependent variable based on the values of several independent variables. Multiple regression analysis equations include constants, regression coefficients, and error terms. The coefficient of determination, or R^2, is a value between 0 and 1 used to determine how much the independent variable influences the dependent variable. The approximation R^2 is often used to account for bias in the number of independent variables in the model. A statistical test t is used to determine whether an individual independent variable has a significant effect on the dependent variable. Moderated Regression Analysis (MRA) is a specialized application of multiple linear regression involving interactions between variables. The purpose of MRA is to determine whether a moderator variable can strengthen or weaken the relationship between independent and dependent variables. Three regression test models are available in MRA: interaction test, absolute difference test, and residual test. Different types of moderator variables include homologizers, quasi-moderators, and pure moderators, each of which affects the relationship between independent and dependent variables in different ways.

Adjustment equations used in MRA include constants, regression coefficients, error terms, and independent and adjustment variables. GCG is an example of a moderator variable that influences the relationship between independent and dependent variables.

3. Results and Discussions

3.1. Company Overview

The study looked at 30 companies listed on the Indonesia Stock Exchange and indexed in the Jakarta Islamic Index (JII) from 2014 to 2018. The selection process selected the 60 stocks with the highest market capitalization over the past year and the 30 stocks with the highest daily trading volume on the regular market. Companies were required to index his JII through the above period and publish annual results.

Based on these criteria, the following 9 companies were obtained in **Table 3.**

Table 3. Companies Overview

NO	CODE	COMPANY NAME	COMPANY LOCATION	BUSINESS FIELD	OWNERSHIP STATUS
1	ASII	PT. Astra International Tbk	North Jakarta	Mining, General trade, industrial transport, agriculture, consulting and development.	Jardine Cycle & Carriage Ltd (50.11%), Budi Setiadharma (0.02%), Anthony John Liddell Nightingale (0.02%), Suparno Djasmin (0.00%), Other Communities each below 5% (49.85%).
2	ICBP	PT. Indofood CBP Sukses Makmur Tbk	Bekasi	Production of noodles and seasonings, biscuits, cooling, snacks, coolie food products, nutrition, beverages, non-alcoholic, transport, trade, management services, packaging, warehousing.	PT Indofood Sukses Makmur Tbk (80.53%), Public with ownership below 5% (19.47%).
3	INDF	PT. Indofood Sukses Makmur Tbk	Jakarta, Indonesia	Established food and soft drinks, seasonings, cooking oil, packaging, textile manufacturing, wheat sack manufacturing, grain milling, trade, agribusiness & transportation services	CAB Holdings Limited (50.07%), Anthoni Salim (0.02%), Taufik Wiraatmadja (0.00%), Franciscus Welirang (0.00%), Public with ownership below 5% (49.91%).
4	KLBF	PT. Kalbe Farma Tbk	Cempaka Putih, Jakarta	Trade, development pharmaceutical preparations as well as drugs and health products	PT Gira Sole Prima 10.17% PT Santa Seha Sanadi 9.71% PT Diptanala Bahana 9.49% PT Lucasta Murni C. 9.47% PT Ira Farm Harvest 9.21% PT Bina Arta Charisma 8.63% Public 43.32%
5	PTPP	PT. PP (Persero) Tbk	Rebo Market-Jakarta	Prefabricated Construction Services, Property & Realty, Equipment, Investment, and EPC (Engineering, Procurement & Construction),	Government of the Republic of Indonesia (51%) • Employees and Employee Cooperatives Shareholders of PP (KKPSPP) (0.08%), public with ownership below 5% (48.92%)
6	SMGR	PT. Semen Indonesia (Persero) Tbk	Gresik	Running a business in the industrial cement field	Government of the Republic of Indonesia 51.01%, people with ownership below 5% (48.99%)
7	TLKM	PT. Telekomunikasi Indonesia (Persero)Tbk	Bandung, West Java, Indonesia	Plan, build, provide, develop, operate, market or lease, maintain telecommunications and informatics networks	Government of the Republic of Indonesia 52.09%, The Bank of New York Mellon Corporation (4.99%), Public 42.92%)
8	UNTR	United Tractors Tbk	Cakung Jakarta Indonesia	Heavy Equipment Distributor, Mining, Contractor, Coal Mining	PT Astra International Tbk (59.50%), Public with ownership below 5% (40.50%)
9	UNVR	Unilever Indonesia Tbk	Jakarta	Production, distribution, marketing of consumer goods, including soaps, detergents, margarine, condiment-ice cream seasonings, cosmetic products, soy sauce, beverage products and fruit juice drinks.	Unilever Indonesia Holding B.V. (85%), public with ownership below 5% (15%)

3.2. Research Data

Survey data from verified company reports publicly indexed on the Jakarta Islamic Index (JII) between 2014 and 2018 were analyzed. This study focuses on accrued EM as measured by calculating discretionary accruals (DA) from the annual reports of nine companies. The calculation results are shown in **Table 4**.

1. Real Profit Management

In this study, we calculated REM based on discretionary cash flow operations (ABCFO), discretionary production (ABPRD), and discretionary spending (ABDisexp) in the annual reports of nine companies. Real Profit Management calculation results are listed in **Table 5** Discretionary cash flow (ABCFO), *Discretionary Production* (ABPRD) as listed in **Table 6**, Discretionary Expense (ABDisexp) shown in **Table 7.**

Table 4 Accrual Profit Management Data

NO	CODE	2014	2015	2016	2017	2018	Chart
1	ASII	-0.00678	0.00132	-0.00282	-0.00424	-0.00831	
2	ICBP	-0.0037	-0.00377	-0.00425	-0.00171	-0.00098	
3	INDF	0.00253	-0.00229	-0.00085	-0.00452	0.0002	
4	KLBF	-0.00361	0.00053	-0.00454	-0.00338	-0.0052	
5	PTPP	-0.04627	-0.02281	-0.02964	-0.03692	-0.0288	
6	SMGR	-0.00357	-0.00122	-0.00218	-0.0047	-0.00419	
7	TLKM	-0.0006	-0.00074	-0.00004	-0.00272	0.00068	
8	UNTR	-0.00544	0.00505	-0.00267	-0.02067	-0.01354	
9	UNVR	-0.00429	-0.0082	-0.00281	-0.01329	-0.0028	

Table 5 Data Discretionary Cash Flow Operation

NO	CODE	2014	2015	2016	2017	2018	Chart
1	ASII	0.08677	0.23651	0.13559	0.03461	0.02313	
2	ICBP	0.02165	0.14371	0.14164	0.19963	0.1238	
3	INDF	0.05754	0.08912	0.10933	0.0853	0.07815	
4	KLBF	0.1631	0.22699	0.12351	0.1524	0.1799	
5	PTPP	0.02082	-0.04948	-0.01047	-0.06174	-0.02863	
6	SMGR	0.15731	0.2416	0.17873	0.05828	0.06743	
7	TLKM	0.25816	0.2214	0.2234	0.22807	0.26221	
8	UNTR	0.17812	0.31868	1.43983	-0.05411	0.02418	
9	UNVR	0.33255	0.42487	0.3321	0.45901	0.52161	

Table 6 Data Discretionary Production

NO	CODE	2014	2015	2016	2017	2018	Chart
1	ASII	-0.01468	0.04868	-0.02259	-0.06271	-0.05201	
2	ICBP	-0.07229	-0.12344	-0.1253	-0.12911	-0.12527	
3	INDF	-0.04594	-0.05873	-0.07896	-0.06052	-0.04731	
4	KLBF	-0.38913	-0.38351	-0.36228	-0.34431	-0.3784	
5	PTPP	0.14986	0.04137	0.04794	0.01921	0.08278	
6	SMGR	-0.16214	-0.15442	-0.11549	-0.04191	-0.06876	
7	TLKM	-0.35282	0.32435	-0.3396	-0.33	-0.31053	
8	UNTR	-0.03069	-0.04055	-0.32869	-0.01505	0.04174	
9	UNVR	-0.69575	-0.72635	-0.75975	-0.69715	-0.67855	

Table 7 Discretionary Expense Data

NO	CODE	2014	2015	2016	2017	2018	Chart
1	ASII	-0.36879	-0.31381	-0.2902	-0.29048	-0.29428	
2	ICBP	-0.42954	-0.41117	-0.42144	-0.4104	-0.39674	
3	INDF	-0.26929	-0.2525	-0.2904	-0.28813	-0.27114	
4	KLBF	-0.27237	-0.2503	-0.24437	-0.23934	-0.24847	
5	PTPP	-0.44181	-0.38358	-0.2722	-0.26528	-0.24702	
6	SMGR	-0.27699	-0.2457	-0.19924	-0.18847	-0.22525	
7	TLKM	-0.28166	-0.27812	-0.29072	-0.28556	-0.29312	
8	UNTR	-0.40843	-0.3685	-1.73188	-0.36592	-0.34403	
9	UNVR	-0.62374	-0.53481	-0.55153	-0.52238	-0.52595	

Table 8 Institutional Ownership Data

NO	CODE	2014	2015	2016	2017	2018	Chart
1	ASII	0.50115	0.50115	0.50115	0.50115	0.50115	
2	ICBP	0.80533	0.80533	0.80533	0.80533	0.80533	
3	INDF	0.50067	0.50067	0.50067	0.50067	0.50067	
4	KLBF	0.56509	0.56509	0.56509	0.56777	0.56966	
5	PTPP	0.55012	0.54637	0.51101	0.51078	0.51078	
6	SMGR	0.51006	0.51006	0.51006	0.51006	0.51006	
7	TLKM	0.58138	0.58138	0.58138	0.57223	0.56098	
8	UNTR	0.59497	0.59497	0.59497	0.59497	0.59497	
9	UNVR	0.84992	0.84992	0.84992	0.84992	0.84992	

Table 9 Independent Board of Commissioners Data

NO	CODE	2014	2015	2016	2017	2018	Chart
1	ASII	0.36364	0.36364	0.33333	0.33333	0.3	
2	ICBP	0.42857	0.42857	0.42857	0.42857	0.42857	
3	INDF	0.37500	0.375	0.375	0.375	0.375	
4	KLBF	0.33333	0.42857	0.42857	0.42857	0.33333	
5	PTPP	0.40000	0.33333	0.33333	0.33333	0.33333	
6	SMGR	0.42857	0.28571	0.28571	0.28571	0.28571	
7	TLKM	0.42857	0.42857	0.42857	0.57143	0.57143	
8	UNTR	0.33333	0.33333	0.33333	0.33333	0.33333	
9	UNVR	0.28571	0.28571	0.28571	0.28571	0.28571	

Table 10 Audit Committee Data

NO	CODE	YEAR					Chart
		2014	2015	2016	2017	2018	
1	ASII	4	4	4	4	4	
2	ICBP	3	3	3	3	3	
3	INDF	3	3	3	3	3	
4	KLBF	3	3	3	3	3	
5	PTPP	4	3	3	3	3	
6	SMGR	5	4	4	4	4	
7	TLKM	6	5	6	6	6	
8	UNTR	3	3	3	3	3	
9	UNVR	3	2	3	3	3	

Table 11 Board of Directors Data

NO	CODE	YEAR					Chart
		2014	2015	2016	2017	2018	
1	ASII	9	10	11	9	10	
2	ICBP	9	9	9	9	8	
3	INDF	10	10	10	10	10	
4	KLBF	5	5	5	6	6	
5	PTPP	6	6	6	6	6	
6	SMGR	7	7	7	7	7	
7	TLKM	8	8	7	8	8	
8	UNTR	5	6	7	7	7	
9	UNVR	8	9	10	10	10	

Table 12 FV Data

NO	CODE	YEAR					Chart
		2014	2015	2016	2017	2018	
1	ASII	1.76433	1.47413	1.74505	1.6068	1.46014	
2	ICBP	1.94323	1.86226	3.81988	3.63972	3.88531	
3	INDF	1.22066	1.02523	1.31206	1.22452	1.16053	
4	KLBF	7.11108	4.71899	4.84552	4.93139	4.0836	
5	PTPP	1.96848	1.66222	1.41144	1.05085	0.90248	
6	SMGR	3.07056	2.05309	1.5392	1.58441	1.69349	
7	TLKM	2.42996	2.32125	2.646	2.68992	2.3523	
8	UNTR	1.43425	1.38848	1.57263	2.02731	1.38672	
9	UNVR	4.11913	4.28256	4.25483	5.23825	4.1605	

2. *Good Corporate Governance*

The calculation of GCG from the proxy calculation of institutional ownership, board of directors, independent commissioners, audit committee in the annual report of 9 companies. The following are the results of calculations from CG divided into Institutional Ownership as listed in **Table 8**, Independent Board of Commissioners, detailed calculation stated in **Table 9**, Audit Committee, detail scoring in **Table 10** and Board of Directors listed in **Table 11.**

3. *Firm Value (FV)*

The calculations of FV are based on the calculation of Tobin's Q ratio from the annual report of 9 companies, **Table 12** is the result of the calculation of the FV.

3.3. Analysis Results

1. *Descriptive Statistics*

Descriptive statistics is a tool to describe a data from the variables used. The measurements used are mean, standard deviation, minimum, maximum. Here is a list of descriptive statistical results:

Table 13 Descriptive Statistical Test Results

	N	MINIMUM	MAXIMUM	MEAN	STD. DEVIATION
DA	45	-,04627	,00505	-,00686	,01058
ABCFO	45	-,06174	1,43983	,18125	,23346
ABPRD	45	-,75975	,14986	-,19149	,23544
ABDisexp	45	-1,73188	-,18847	-,36447	,23178
Q	45	,90248	7,11108	2,53499	1,44692
KI	45	,50067	,84992	,60332	,12608
Jakarta	45	,28571	,57143	,36862	,06936
KA	45	3	6	3,58	,941
DD	45	5	11	7,84	1,731
Valid N	45				

The following statements provide an analysis of various variables based on the data in **Table 13**.

a. **Table 13** shows that the dependent variable has a maximum value of 7.11108, a minimum value of 0.90248, a mean of 2.53499, and a standard deviation of 1.44692. The company with the lowest FV is PT. In 2018, PP (Persero) was the most common, and PT was the most common. The median enterprise value is 2.53499, indicating that the FV is higher than that of publicly traded companies. This can attract investors as the capital expenditure is lower than the value of the company's book assets.

b. **Table 13** shows that the discretionary clause has a maximum of 0.00505, a mean of -0.00686, a minimum of -0.04627, and a standard deviation of 0.01058. point. PT. United Tractor won the highest discretionary award in 2015, while PP (Persero) had the lowest discretionary provision in his 2014. The average value for profit control is -0.00686, indicating relatively little profit control action. A value close to zero represents that the company is taking profit management measures in preparing its financial statements by establishing a policy that benefits the company by controlling accrual transactions.

c. **Table 13** shows that the discretionary cash flow operation has a maximum value of 1.43983, a minimum value of -0.06174, an average value of 0.18125, and a standard deviation of 0.23346. point. PP (Persero) had the lowest discretionary cash flow operating value in 2017, while PT. United Tractor scored the highest discretionary cash flow operating value in 2016. The average positive real profit management is 0.18125, indicating that the pattern of increasing profit in the preparation of financial statements is being followed by increasing the level of operating cash flow in the firm.

d. **Table 13** shows that the maximum value for discretionary production is 0.14986, the minimum value is -0.75975, the mean value is -0.19149, and the standard deviation is 0.23544. point. PT. PP (Persero) had the highest discretionary production value in 2014. The average value of real profit management is -0.19150, indicating that firms take real profit management measures when preparing their financial statements by varying their production levels.

e. **Table 13** shows that the maximum discretionary effort is -0.18847, the minimum is -1.73188, the mean is -0.36447, and the standard deviation is 0.23178. point. United Tractor has the lowest discretionary spending in 2016 and PT. Semen Indonesia has the highest discretionary spending in 2017. The average for Real Profit Management is -0.36447, indicating that the company is taking Real Profit Management actions to manipulate discretionary spending and prepare financial statements.

f. **Table 13** shows that the institutional owned maximum is 0.84992, minimum is 0.50067, mean is 0.60332, and standard deviation is 0.12608. point. Indofood Sukses Makmur had the lowest number of institutional investors from 2014 to 2018 and PT. Unilever Indonesia had the highest institutional asset value from 2014 to 2018. A positive institutional ownership mean is 0. The median number of directors is 6.21, indicating that companies increase the number of directors as they increase shareholder value.

In summary, the information provided is based on **Table 13**, which shows several variables related to different aspects of companies such as directors. The table shows some descriptive statistics such as minimum, maximum, mean and standard deviation for each variable for different companies and years. The information presented reveals how companies add value by manipulating their financial statements and adopting specific CG practices.

2. Normality Test

The normality test is a test to find out that in a regression model, the residual value has been normally distributed. This study used the Kolmogorov-Smirnov test regarding the level of significance. The residual has been distributed normal if the significance value > 0.05 can be seen from the value of One Sample Kolomogorov-Sminov Test column Asymp. sig (2 tailed).

Table 14. Normality Test Results

VARIABLE	K-S Z	*ASYMP. GIS (2 TAILED)*	DECISION
Residuals	0,083	0,194	Usual

From **Table 14**, it illustrates the *Kolmogorov-Smirnov* value of 0.083 and the significance level of 0.194 which means that the residual variable value has been normally distributed because the significance value > 0.05 with the assumption of normality fulfilled.

3. Heteroscedasticity Test

Heteroscedasticity test to test multiple regression analysis whether it has *variance* inequality in an observation. However, if the pattern is not clearly depicted and the dots have spread below and above zero, then it has passed the heteroscedasticity test. This research uses *a scatterplot* graph test. The following is a graph of heteroscedasticity test from the research data that has been processed:
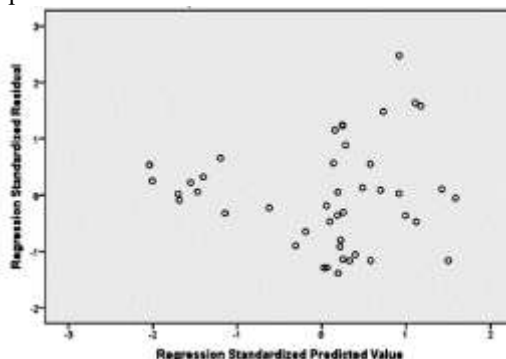
Fig. 1. Heteroscedasticity Test Results – Scatterplot

Based on the **Fig. 1**, it is known that the dots have spread randomly and the pattern does not form clearly. Thus, the processed data escapes heteroscedasticity. To further ensure that there are no symptoms of heteroscedasticity, the researchers used the Glacier test with the following results:

Table 15. Heteroscedasticity Test Results – Glacier

	TYPE	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	T	SIG.
		B	STD. ERROR	BETA		
1	(Constant)	-,404	,465		-,869	,390
	DA	4,443	8,120	,123	,547	,588
	ABCFO	-,677	,772	-,412	-,877	,386
	ABPRD	-,268	,349	-,165	-,768	,448
	ABDisexp	-,260	,706	-,157	-,368	,715
	KA	,128	,106	,223	,209	,234
	DD	,007	,037	,034	,200	,843
	KI	,763	,377	,422	,022	,057
	Jakarta	,096	,968	,017	,099	,922

Table 15 shows the significance value of the variable is above 0.05 and the data used do not contain symptoms of heteroskedasticity.

Autocorrelation Test

The autocorrelation test is a test to determine the linear regression model there is a correlation between the residual period t with the residual in period t-1 (previous).   If there is a correlation, it is called an autocorrelation *problem*. The research used *the Durbin Watson method (DW test),* **Table 16** showing the result of the test.

Table 16 Autocorrelation Assumption Test Results

DURBIN WATSON	D-W TABLE (K=8, N=55)		DU < D-W < 4 – DU	INFORMATION
	Dl	Du		
1,963	1.1391	1.9578	2.0422	No autocorrelation

From the **Table 16**, it is known that *Durbin Watson* is worth 1.96 3. While from the D-W table, for n = 45, k = 8 data were obtained, namely dl = 1.1391 and du = 1.9578. The result of 4 – du is 4 – 1.9578 = 2.0422. In the table, the D-W number is 1.963. Because the numbers lie between du (1.9578 and 4-du (2.0422), regression models escape autocorrelation.

Multicollinearity Test

Multicollinearity test, which is a test to determine the existence of regression models in independent variables (independent) has a correlation. Using *a tolerance* value of less than 0.10, the results of the multicollinearity test are:

Table 17 Multicollinearity Assumption Test Results

VARIABLE	COLLINEARITY STATISTICS		INFORMATION
	TOLERANCE	VIF	
DA	,347	2,883	No multicollinearity occurs
ABCFO	,179	2,663	No multicollinearity occurs
ABPRD	,379	2,638	No multicollinearity occurs
ABDisexp	,196	1,461	No multicollinearity occurs
KI	,244	4,105	No multicollinearity occurs
Jakarta	,611	1,635	No multicollinearity occurs
KA	,184	5,438	No multicollinearity occurs
DD	,569	1,758	No multicollinearity occurs

Based on **Table 17**, the independent variable obtained a VIF value smaller than 10 so that the regression has passed the multicollinearity test.

Hypothesis of the rest results

The test results in the study used multiple regression analysis tools, with 0.05 and $a =$ aimed to prove the influence partially firstly **Multiple Regression Analysis** can be used to see the effect of *discretionary accrual* independent variables and real profit management calculated by discretionary *cash flow operation (ABCFO), discretionary production (ABPRD) and discretionary expense (ABDisexp)* on company value (Tobin's Q). The results are seen in **Table 18**.

Table 18. Recapitulation of Multiple Regression Analysis Results

INDEPENDENT VARIABLES	B	BETA	T	SIG. T	INFORMATION
DA	18,366	40,799	0,450	0,655	Insignificant
ABCFO	-14,672	-,797	-3,493	,001	Significant
ABPRD	-17,319	-,949	-9,282	,000	Significant
ABDisexp	-15,461	-,834	-4,193	,000	Significant
Dependent variable: Tobin's Q					
Constant	-2,548				
R	0,865				
R *Square*	0,748				
Adjusted R Square	0,723				
F	29,742				
Sig F	0,000				

The following equation is obtained **Table 18**:
$Y = \alpha + \beta 1 X_1 + \beta 2 X_2 + \beta 3 X_3 + \beta 4 X_4$
$Y = -2.548 + 18.366 X_1 + (-14.672) X_2 + (-17.319) X_3 + (-15.461) X_4$
From the two equations we can derive the following equation:
a. The constant value of -2.548 indicates that if all four variables (discretionary accruals, discretionary pay operations, discretionary spending, and discretionary production) are zero, the FV is -2.548.
b. The regression coefficient of discretionary deferral is 18.366 and its significance is 0.655, indicating that discretionary deferral has a positive impact on FV. Specifically, a 1 unit increase in the discretionary allowance does not result in an 18.366 increase in FV.
c. The regression coefficient of discretionary operation is -14.672 and its significance is 0.001, indicating that discretionary operation has a large negative impact on FV. Specifically, a 1-unit increase in the discretionary cash flow operation reduces the FV by 14.672.
d. The regression coefficient for discretionary production is -17.319, with a significance of 0.000, suggesting that a 1-unit increase in discretionary production reduces FV by 17.319.
e. The regression coefficient for discretionary effort is -15.461 with a significance of 0.000, indicating that a 1-unit increase in discretionary effort reduces FV by 15,461.

The Second is **Coefficient of Determination:** a tool that quantifies how much an independent variable influences a dependent variable. The value of R^2 increases with each additional independent variable. As a result, researchers often use adjusted R^2 to estimate the magnitude of the effect of the independent (free) variable on the dependent variable. Unlike R^2, adjusted R^2 can increase or decrease as variables are added to the model. A low adjusted R^2 value indicates that the independent variable does not explain the dependent variable well. Conversely, a high adjusted R^2 value close to 1 indicates that the independent variable essentially explains the dependent variable.

Table 19. Test Result R^2

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
,884[a]	,781	,733	2,22105047
Predictors: (Constant), DKI, DD, ABCFO, KI, DA, ABPRD, KA, ABDisexp			

Based on **Table 19**, the value *(adjusted R square)* is 0.733. This means that 73.3% of FV variables are influenced by discretionary *accrual* variables, dis*cretionary cash flow*, discretionary expense and *discretionary production*, audit committee, institutional ownership, independent commissioners, and board of directors, the remaining 27.7%influenced other factors.

Partial Test (Statistical Test t) it is used to explain whether there is an effect of discretionary *accrual*, discretionary *cash flow operation*, discretionary *expense discretionary production* with FV. If the significance value t < the *level of significance*, there is an individual significant influence. The partial test results are as follows:

Table 20 Recapitulation of T-Test Analysis Results

INDEPENDENT VARIABLES	T	SIG. T	INFORMATION
DA	,450	,655	Insignificant
ABCFO	-3,493	,001	Significant
ABPRD	-9,282	,000	Significant
ABDisexp	-4,193	,000	Significant

Based on the results in **Table 20**, the results are:

a. First, the t-value for the discretionary variable is 0.655, which is greater than the significance level of 0.05. This means that the occurrence of discretion does not affect FV. Therefore, hypothesis H_1 is rejected, suggesting that accrued profit management does not positively affect FV.

b. Second, the value of the variable cash flow discretionary operation is si 0.001, which is less than 0.05. This shows the impact on FV. Hypothesis H_{2a} is accepted. This means that real profit management through discretionary cash flow operations has a significant negative impact on FV.

c. Third, variable discretionary production has a significant value of 0.000i, which is less than 0.05. This shows the impact on FV. The H_{2b} hypothesis is accepted, suggesting that real profit management through discretionary production has a significant negative impact on FV.

d. Finally, the sign value of the discretionary cost variable is 0.000, which is less than 0.05, indicating an impact on FV. The H_{2c} hypothesis is accepted, showing that real profit management through discretionary spending has a significant negative impact on FV.

Moderation Regression Analysis is the first step in conducting a moderation regression analysis is to determine the type of variables used, whether including pure moderator, quasi moderator and homologizer moderator such described in Table 21.

Table 21 Types of Moderator Variables

Interaction between Moderator variable and Predictor Variable (X*Z)	Relationship between Moderator Variables and Criteria Variables	
	There is a connection	No relationship
No interaction	(1) Includes *intervening, exogenous* variables (not moderation)	(2) Includes *moderator homologizer* variables
There is interaction	(3) Includes *quasi-moderator* variables (pseudo-moderation)	(4) Includes pure *moderator* (pure moderation)

In the study, there were 16 moderation regression models, which are as follows:

This paper examines the impact of various CG mechanisms on the relationship between discretionary costs and goodwill. The study uses a sample of 608 manufacturing companies listed on the Indonesian Stock Exchange between 2014 and 2018. Analysis shows that institutional ownership reduces the link between discretionary production and FV, whereas boards of directors, independent boards, and audit committees have less impact on the relationship. However, the study found that independent commissions may limit the link between discretionary spending and goodwill. Audit committees, on the other hand, can strengthen the relationship between discretionary spending and FV. The board can also limit the link between discretionary spending and corporate value by improving the relationship between discretionary output and FV. Overall, the results suggest that CG mechanisms play an important role in mitigating the impact of discretionary spending on corporate value, with firms using discretionary spending to avoid impairment. Advised to reduce.

Accrual profit management affects firm value

Based on the statements provided, the study used a t-test to analyze the impact of discretionary occurrences on FV. Research has shown that arbitrary breaks do not affect FV. In other words, strengthening accrued profit management does not necessarily increase FV. However, the study points to the following control measures: B. Changing the principle of recognizing income and expenses at different periods may affect the company's profit and value.

Real profit management affects firm value

Based on the t-test, the real profit management values calculated by discretionary spending, discretionary cash flow operations, and discretionary production have values of -4.193 and -3.493, respectively. -9.282 at the 0.000 significance level. 0.001; and 0.000. The results of this study show that real profit management has a negative impact on FV regardless of whether it is calculated by discretionary cash flow, discretionary spending, or discretionary production. The negative effects caused are even greater.

Moderation of GCG on the accrual profit management and firm value relationship

This research examines the roles of various stakeholders such as institutional owners, independent committees, audit committees and boards of directors in mitigating the relationship between accrual management and FV. The study found that institutional ownership does not mitigate the weakening of accrual-based EM of FVs. Even the presence of an independent commissioner has no coordinating role that weakens the relationship. The moderation test shown in Table 22.

Table 22. Recapitulation of Moderation Test Results Accrual Profit Management

MODERATION VARIABLES	MODERATION TYPE	B	SIG. T	INFORMATION
DA*KI	Not Moderation	-81,343	0,761	Insignificant
DA*DKI	Not Moderation	-106,058	0,949	Insignificant
DA*KA	Not Moderation	29,339	0,791	Insignificant
DA*DD	Not Moderation	-107,646	0,130	Insignificant

Also, the Audit Committee does not measure its management of cumulative profits by FV. The board cannot mitigate this by having less control over potential profits and FV. Overall, the study finds that these parties have limitations in overseeing and promoting transparency, fairness, responsibility, and accountability in corporate operations, and that managers cannot manipulate accounting standards for personal gain. It suggests that it may not prevent you from doing so.

Moderation of GCG on the real profit management with firm value

The moderation test shown in Table 23.

Table 23. Recapitulation of moderation test results real profit management

MODERATION VARIABLES	MODERATION TYPE	B	SIG. T	INFORMATION
ABCFO*KI	Not Moderation	21,370	0,078	Insignificant
ABCFO*DKI	Not Moderation	-156,424	0,110	Insignificant
ABCFO*KA	Not Moderation	-7,387	0,343	Insignificant
ABCFO*DD	Not Moderation	-0,850	0,415	Insignificant
ABPRD*KI	*Pure Moderator*	-17,968	0,001	Significant
ABPRD*DKI	*Pure Moderator*	88,801	0,012	Significant
ABPRD*KA	*Quasi Moderator*	7,266	0,006	Significant
ABPRD*DD	*Pure Moderator*	4,885	0,029	Significant
ABDisexp*KI	*Pure Moderator*	-61,774	0,001	Significant
ABDisexp*DKI	*Pure Moderator*	362,019	0,000	Significant
ABDisexp*KA	*Pure Moderator*	30,750	0,007	Significant
ABDisexp*DD	*Pure Moderator*	-12,794	0,000	Significant

Based on the data in **Table 23** is represents the research into how different CG structures affect profit management and FV. The study found that institutional ownership is not aligned with profit management policies, and that high institutional ownership does not significantly affect corporate profits. However, institutional ownership can soften the relationship between real profit management and the calculation of discretionary output and FV expenditure. Independent commissioners can coordinate profit management through discretionary production and spending, but lack of independent action can lead to increased profit manipulation. The audit committee can ease real profit management by strengthening the relationship between discretionary spending, discretionary production, and FV, but the audit committee lacks oversight and independence. The Board plays a key role in coordinating real income management calculations, particularly in the areas of discretionary production, discretionary cash flow operations, and discretionary spending. Boards can also mitigate the impact of discretionary costs on FV.

Managerial Aspects

Corporate profit management refers to the activity of manipulating profits to achieve specific goals within an enterprise, which may improve the performance of the enterprise. However, such manipulation may adversely affect the FVs. Publicly traded companies must adopt and implement GCG practices to prevent manipulation. One study

found that revenue management had no measurable impact on FV, but managing actual revenue through discretionary production, discretionary cash flow manipulation, and discretionary spending had a significant negative impact on FV. may give the research suggests that companies should follow established financial reporting standards and principles to enhance investor confidence and protect the interests of stakeholders. GCG, including an audit committee, independent commissioner, board of directors, and institutional ownership can minimize the impact of profit management. Reputable companies must adhere to the principles of fairness, transparency, accountability, and responsibility, and implement sound CG to foster sound organizations.

4. Conclusions

The conclusions of the study on the role of GCG as a moderator for the effects of accrued and real profit management on the FV before COVID-19 pandemic of companies indexed in the Jakarta Islamic Index (JII) 2014-2018 are:

1. AEM by the voluntary accrual approach does not have a significant positive impact on the FV, as indicated by the significant value of 0.655, which is greater than 0.05 for the value coefficient of 18.366.
2. Discretionary cash flow manipulation, discretionary production, and real profit management through the discretionary cost approach have some significant negative effects on business value, as indicated by the consecutive coefficient values of -14,672. -17,319; -15.461 Continuous significance level 0.001. 0.000; 0.000.
3. The role of GCG is to reduce the impact of accrual management through a voluntary accrual approach to FV by independent committees, institutional ownership, audit committees, and boards of directors: is represented.
   a. The role of institutional ownership cannot mitigate the impact of accrual management on FV, as indicated by the coefficient value of -81.343 at the 0.761 significance level.
   b. The role of an independent committee cannot mitigate the impact of accrual management on FV, as indicated by the coefficient value of -106.058 at the 0.949 significance level.
   c. The audit committee's role cannot mitigate the impact of accounts payable management on the FV, as indicated by the coefficient value of 29.339 at the 0.791 significance level.
   d. The role of the board cannot mitigate the impact of accrual management on FV, as indicated by the coefficient value of -107.646 at the 0.130 significance level.
4. The role of GCG is represented by corporate ownership, independent boards, audit committees, and boards of directors, and the impact of real profit management through a discretionary cash flow approach on FV as follows: reduce the:
   a. The role of institutional ownership cannot mitigate the impact of real profit management on FV due to discretionary cash flow manipulation, as indicated by a coefficient value of 21.370 at a significance level of 0.078.
   b. The role of the Independent Committee cannot mitigate the impact of real profit management by discretionary cash flow manipulation on FV, as indicated by the coefficient value of -156.424 at the 0.110 significance level.
   c. As indicated by the coefficient value of -7.387 at the significance level of 0.343, the role of the audit committee cannot mitigate the impact on FV of managing REM through discretionary cash flow operations. The role of the board cannot mitigate the impact of managing REM through discretionary cash flow manipulation on FV, as indicated by the coefficient value of -0.850 at the 0.415 significance level.
5. The role of GCG is represented by organizational ownership, an independent board of directors, audit committee, and board of directors, which reduces the impact of the discretionary production approach on the FV before COVID-19 pandemic of real profit management.
   a. As indicated by the coefficient value of -17.968 at the significance level of 0.001, the role of institutional ownership can be mitigated by weakening the impact of discretionary production on real profit management on FV.
   b. The role of the independent board can be mitigated by enhancing the impact of discretionary production real profit management on FV, as indicated by the coefficient value of 88.801 at the 0.012 significance level.
   c. The role of the audit committee can be softened by enhancing the impact of discretionary production real profit management on FV, as indicated by the coefficient value of 7.266 at the significance level of 0.006.
   d. The role of the board can be mitigated by enhancing the impact of discretionary production real profit management on FV, as indicated by the coefficient value of 4.885 at the 0.029 significance level.
6. The role of GCG is represented by corporate ownership, independent boards, audit committees, and boards that mitigate the impact of real profit management through a discretionary cost approach on FV.

a. The role of institutional ownership can be mitigated by weakening the impact of discretionary spending on real profit management on FV, as indicated by the coefficient value of -61.774 at the significance level of 0.001.

b. The role of independent committees can be mitigated by enhancing the influence of real profit management through discretionary spending FV, as indicated by the coefficient value of 362.019 at the 0.00 significance level.

c. The audit committee's role can be mitigated by enhancing the influence of real profit management through discretionary spending on the FV indicated by a coefficient value of 30.750 at the 0.007 significance level.

The role of institutional ownership can be mitigated by reducing the impact of real profit management on FV from discretionary spending. This is indicated by a coefficient value of -12.794 at a significance level of 0.000.

This research surely does have the limitation without considering COVID-19 pandemic. The further suggested topic for the next research should be around GCG moderating effect to the relationship of AEM and REM on the FV after pandemic which have certain characteristic during new normal. Also, the next interesting topic is AEM and REM simulation during pandemic scheme. Restoring the operations of firms in the post-pandemic era is of utmost significance such suggested by [29].

5. CRedit Author Statement

Hesti Wahyuni: Conceptualization, Methodology, Writing-Reviewing and Editing, Supervision, Resources, Validity.
Tuci Diana: Data curation, Writing- Original draft preparation, Data curation, Visualization, Investigation, Resources.
Taufiq Rochman: Writing- Reviewing and Editing, English pre-proof, Supervision

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7. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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