

**Research Paper****THE INFLUENCE OF OWNERSHIP STRUCTURE ON ACCRUAL EARNINGS MANAGEMENT IN INDONESIAN COMPANIES: PRE- AND POST-COVID 19 IMPACT**Mardianto<sup>1\*</sup>, Jaslyn<sup>2</sup><sup>1,2</sup>Progam Studi Akuntansi, Universitas Internasional Batam\* Corresponding author: [mardianto.zhou@uib.ac.id](mailto:mardianto.zhou@uib.ac.id)<sup>1</sup>**ABSTRACT**

Investigating the impact of the covid-19 pandemic on the relationship between ownership structure and earnings management strategies of Indonesian companies listed in the LQ 45 index is the objective of this study. The primary focus is on how ownership concentration, managerial, institutional, and family ownership affect Accrual Earnings Management (AEM) before and after the pandemic period. Employing multiple linear regression, the research evaluates the effects of these ownership characteristics on AEM in both pre-covid and post-covid periods. The study reveals that a dramatic changes of the landscape effect of ownership structure toward AEM. The findings provide valuable insights into how ownership structures influence earnings management during economic crises, offering guidance for regulators and policymakers in overseeing earnings practices.

Keywords: Accrual Earnings Management, Ownership Structure, Corporate Governance, Covid-19

JEL code: G32, M41

**Article History**

Received : 25 Oktober 2024

Revised : 27 Oktober 2024

Accepted : 08 November 2024

DOI : <http://dx.doi.org/10.37253/gfa.v8i2.9923>Web : <https://journal.uib.ac.id/index.php/gfa/issue/view/113>**Citation**

Mardianto & Jaslyn. (2024). The influence of ownership structure on accrual earnings management in Indonesian companies: pre- and post-covid 19 impact. *Global Financial Accounting Journal*, 8(2), 106-119. doi: <http://dx.doi.org/10.37253/gfa.v8i2.9923>

**INTRODUCTION**

The dynamics of corporate ownership valuation have become an important subject in the context of economic and financial changes, especially in relation to the pre-pandemic and post-covid-19 conditions in Indonesia, which have significantly affected corporate management strategies and profit practices. Before the pandemic, the focus of corporate ownership valuation tended to be stable, with strong influences from managerial, institutional, and family ownership on corporate management (Miroshnychenko et al., 2024). However, the covid-19 epidemic caused significant modifications in management tactics, leading in an increase in both real and accrual earnings management in reaction to unexpected economic and financial difficulties. According to

empirical study, family ownership tends to encourage earnings management strategies during uncertain times, while institutional ownership has a significant role in limiting these behaviors (Yaşar & Yalçın, 2024). Corporate management primarily uses earnings management to manipulate financial statements. AEM is more related to manipulations in accounting records, such as changes in depreciation policies or the recording of receivables. A real-world example is the case of Enron, which extensively used AEM techniques (Weisleder & Kerrigan, 2003).

Managerial ownership, institutional ownership, family ownership, and ownership concentration are independent variables AEM. Conversely, institutional ownership tends to reduce earnings management practices because institutional investors exert stricter oversight over management. Family ownership can increase the risk of AEM due to the pressure to maintain control and the financial performance of the company.

This research concentrates on companies listed in the LQ45 index due to their representation of the top 45 firms with the highest liquidity and large market capitalization on the Indonesia Stock Exchange (IDX). These companies typically exhibit more varied ownership structures, greater transparency, and heightened scrutiny from institutional investors and market analysts, making them ideal candidates for studying earnings management within a complex and diverse framework.

Furthermore, LQ45 businesses are especially vulnerable to the covid-19 pandemic's effects since they are more susceptible to changes in the world economy and financial system. Consequently, this study provides insightful information about how changes in ownership structure affect profits management strategies both before and after the pandemic, as well as how these significant and powerful companies adjust to changing circumstances (Lassoued & Mehdi, 2021).

The effect of ownership structure on earnings management techniques employed before and after the covid-19 epidemic is compared in this study. Prior to the global health crisis, different ownership arrangements, including institutional, family, and managerial ownership, had different effects on managing earnings. However, because institutional investors have the resources and the drive to keep a tight eye on management decisions, institutional ownership typically contributes to a decrease Accrual Earnings Management (AEM).

However, the COVID-19 pandemic brought significant changes. Economic uncertainty and financial pressure led to an increase in earnings management practices, AEM. Research indicates that during this period of uncertainty, institutional ownership played a key role in reducing earnings management practices, while family ownership tended to increase these practices due to the pressure to maintain control and company performance (Kuncara Widagdo et al., 2021). These changes suggest that ownership structure can influence a company's response to economic crises differently compared to stable periods. Company ownership structure is a key element in determining whether shareholder interests are protected from agent exploitation that could harm the company and shareholders (Anita & Amalia, 2021).

This research significantly contributes to understanding how the pandemic affects the dynamics of earnings management in large companies in Indonesia. By providing comparisons between the pre-pandemic and post-pandemic periods, this study helps stakeholders understand how management strategies and ownership structures can adapt to crisis conditions. It also provides insights for regulators to develop more effective policies in overseeing earnings management practices in the future (Purwanti, 2022).

This research provides a significant contribution to understanding how ownership structure influences earnings management practices, especially in crisis situations such as the covid-19 pandemic. This research offers important insights to stakeholders, including regulators, for developing more efficient strategies to monitor and regulate earnings management practices that could potentially harm investors and compromise the integrity of the Indonesian capital market by giving a deeper understanding of earnings management practices, particularly within the LQ45 companies. Finally, by offering a more comprehensive understanding of the ways in which various

independent variables such as managerial, institutional, family, and ownership concentration affect earnings management practices, like Accrual-Based Earnings Management (AEM), in the context of Indonesian companies, this study adds to the body of knowledge on corporate ownership and earnings management.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Agency Theory

Agency theory explains the relationship between managers and shareholders, highlighting how conflicts often arise due to differing interests between the two parties involved in a contract (Standar et al., 2022). The agency problem emerges from the agreement between a principal and an agent when their goals conflict, potentially hindering the achievement of optimal outcomes. In this context, managers, who are responsible for preparing financial statements, have the potential to influence reported profit (Alden Riyadh et al., 2019).

Agency theory addresses this problem by focusing on situations where managers act in their own interests rather than those of the shareholders, often leading to negative outcomes for the latter when management and the business owner's interests coincide, the tension between them can be lessened (Holly, 2021). Management is the agent of the company. The agent is expected to run the business to provide benefit for the principal (Saleh, et al., 2009).

According to (Alyaarubi et al., 2021), earnings management is the process by which managerial choices lead to financial reports that do not fairly represent the management's genuine short-term value-maximizing earnings. This is done within the context of agency theory. As a result, the extent to which managers can manipulate earnings without adequate supervision depends on the business ownership structure.

### Earnings Management

The phenomenon of earnings management can be understood through the lens of agency theory. Earnings management is often employed as a strategy to mitigate adverse financial conditions or financial distress (Yolanda et al., 2019). This practice has the potential to undermine investor confidence (Karina et al., 2023).

Earnings management involves managers exercising discretion in choosing specific accounting methods for financial reporting. Discretionary and non-discretionary accruals are its two main constituents (Holly & Lukman, 2021). Real activities and accrual-based activities are the two categories into which earnings management may be divided (Chang et al., 2019). Managers generally opt for the earnings management method that best suits their company's circumstances, though some companies may use both accrual-based and real earnings management simultaneously (Mardianto et al., 2024).

One approach to earnings management involves manipulating income, which can impact the company's cash flow. Increasing inventory to lower the cost of products sold, lowering research and development costs, and providing discounts to increase sales are all ways to achieve real earnings management (Alexandra & Eriandani, 2022). It is possible for managers to manipulate short-term profit reports by making operational decisions that have a direct impact on the company's cash flow. Accrual Earnings Management (AEM), and it is frequently subject to less scrutiny from regulators, auditors, and other stakeholders (Arbi et al., 2022).

In contrast, AEM directly affects the amount of accruals but does not influence the company's cash flow (Arbi et al., 2022). Discretionary and non-discretionary forms of accrual-based earnings management exist (Chang et al., 2019). Managers manipulate financial statements through accrual accounting techniques, such as adjusting depreciation policies, recognizing accounts receivable, or setting aside provisions for losses (Garcia Osma et al., 2022).

## Ownership Structure

Ownership structure refers to the distribution of shares among different types of owners, such as government, institutional or public entities, foreign investors, family members, or managers within a company (Setiany et al., 2020). For example, institutional ownership tends to reduce earnings management practices because institutional investors have the capacity for stricter oversight (Alzoubi, 2016). On the other hand, family ownership can increase the risk of earnings management due to pressure to maintain control and maintain a seemingly good financial performance (Abbadi, 2021).

Managerial ownership is the second key factor in ownership structure of the firm (Siraji & Abdul Nazar, 2021). The proportion of shares held by the company's management in relation to the total number of outstanding shares is known as managerial ownership (Larasati & Lestari, 2022). Others define managerial ownership as the shares held by the company's commissioners and board of directors in addition to by management itself; shares held by institutional investors, the general public, and principals are not included in this definition (Paramitha & Firnanti, 2018).

Real earnings management actions are inversely correlated with managerial ownership, which has a substantial impact (Siraji & Abdul Nazar, 2021). Nonetheless, other research indicates that managers who have ownership interests are more likely to manipulate real earnings (Mohd Suffian et al., 2021). However, other research indicates that because of its oversight practices, managerial ownership acts as a disincentive to accrual earnings management.

H<sub>1a</sub>: Managerial ownership has a significant positive influence on the practice of accrual earnings management (AEM) in the pre-covid-19 period.

H<sub>1b</sub>: Managerial ownership has a significant positive influence on the practice of accrual earnings management (AEM) in the post-covid-19 period.

Institutional ownership pertains to shares held by corporate entities in other companies (Ogabo et al., 2021). Institutional investors are generally effective at providing oversight, which can help reduce the likelihood of management engaging in earnings management (Paramitha & Firnanti, 2018). Research shows that institutional ownership initially has a positive effect on earnings management at lower levels but becomes negative once a certain threshold is crossed (Davis & García-Cestona, 2023). It also enhances informativeness of earnings and decreases manipulation of real activities (Mellado & Saona, 2020). Furthermore, institutional ownership influences upward real earnings management techniques and can lessen managers' inclination to participate in earnings management (Piosik & Genge, 2020). According to certain research, risk-taking and real earnings management have a weaker link when there is institutional ownership (Sartini et al., 2023).

H<sub>2a</sub>: Institutional ownership has a significant positive influence on the practice of accrual earnings management (AEM) in the pre-covid-19 period.

H<sub>2b</sub>: Institutional ownership has a significant positive influence on the practice of accrual earnings management (AEM) in the post-covid-19 period.

According to (Butler et al., 2021), family ownership encompasses shares owned by individuals, families, trusts, estates, and family partnerships. According to (Abbadi, 2021), accrual earnings management approaches have a considerable positive correlation with it. Prior research has concentrated on family ownership and discretionary accruals. Family businesses in Indonesia manage accruals more skilfully than non-family businesses (Suprianto & Setiawan, 2020). The positive correlation between profitability management and corporate social responsibility may also be moderated by family ownership (Garcia Osma et al., 2022). Additionally, there is a higher likelihood of earnings management in family-owned companies or business groups (Yopie & Erika, 2021).

H<sub>3a</sub>: Family ownership has significant positive influence on the practice of accrual earnings management (AEM) in the pre-covid-19 period.

H<sub>3b</sub>: Family ownership has a significant positive influence on the practice of accrual earnings management (AEM) in the post-covid-19 period.

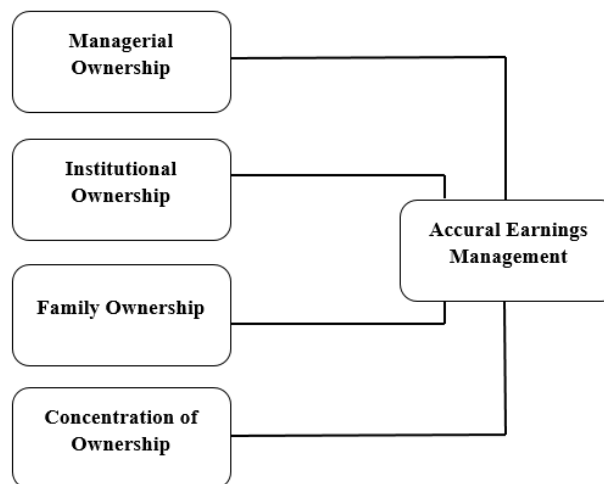
In certain agency contexts, ownership concentration can improve the quality of yearly earnings by lowering earnings management (Grimaldi & Muserra, 2017). Nonetheless, it has been discovered that a high ownership concentration in Palestinian businesses negatively impacts company performance and increases earnings management techniques (Piosik & Genge, 2020). On the other hand, because large shareholders are more likely to keep a close eye on management decisions, ownership concentration can assist prevent earnings manipulation (Mwangi & Nasieku, 2022). Additional studies indicate that the association between accrual earnings management (AEM) and influential female directors is favorably mediated by ownership concentration (Alexandra & Eriandani, 2022).

H<sub>4a</sub>: Ownership concentration has a significant positive influence on the practice of accrual earnings management (AEM) in the pre-covid-19 period.

H<sub>4b</sub>: Ownership concentration has a significant positive influence on the practice of accrual earnings management (AEM) in the post-covid-19 period.

The constellation diagram below shows how the independent and dependent variables are related to one another:

**Figure 1.** Conceptual Framework



**Source:** Processed by the Author (2024)

## RESEARCH METHODOLOGY

### Research Method: Sample and Population

The research conducted is an analytical observational study, with data collection through observation and numerical data processing from financial reports. Analytical studies aim to measure the relationship or association between two variables a factor and an outcome. In observational analytical studies, the factor is naturally occurring, whereas in experimental studies, the researcher assigns participants to either receive or not receive the specific factor (Ranganathan & Aggarwal, 2019). The research objective is correlational analytics aimed at analyzing how influencing factors or independent variables relate to the dependent variable.

The research focuses on manufacturing firms that were listed between 2017 and 2022 on the Indonesia Stock Exchange. A purposive sampling technique is used to collect the research samples, choosing samples according to predetermined standards for their quantity and attributes.

The dependent variable in this study is assessed by Accrual Earnings Management (AEM). Ownership concentration, institutional ownership, management ownership, and family ownership are the independent factors being studied. The goal of the study is to examine how these ownership arrangements affect the organizations' earnings management strategies throughout the given time frame.

#### Accrual Earnings Management (AEM)

To detect earnings management, we use the Modified Jones's model to determine cumulative accounting variables that reflect earnings management. Discretionary accruals are calculated through the following steps (Dwija Putri & Wirawati, 2023).

$$TACit = Nit - CFOit$$

Description:

TACit = Total accruals of company i in period t

Nit = Net profit of company i in period t

CFOit = Cash flow from operating activities of company i in period t

Determine the coefficient value from the total accrual regression

$$\frac{TACit}{TAit} = \beta_1 \left( \frac{1}{TAit-1} \right) + \beta_2 \left[ \frac{\Delta REVit}{TAit-1} \right] + \beta_3 \left[ \frac{PPEit}{TAit-1} \right]$$

Description:

TACit = Total accruals of company i in period t

Ait-1 = Total assets of company i in period t-1

$\Delta REVt$  = Change in company i's income from year t-1 to year t

PPEit = Company fixed assets in year t

Determine non-discretionary accruals:

$$NDAit = \beta_1 \left( \frac{1}{TAit-1} \right) + \beta_2 \left[ \frac{\Delta REVit - \Delta RECit}{TAit-1} \right] + \beta_3 \left[ \frac{PPEit}{TAit-1} \right]$$

Determine discretionary accruals:

$$DAit = \left( \frac{TACit}{TAit-1} \right) - NDAit$$

Description:

DAit = Discretionary accruals of company i in period t

TACit = Total accrual of company i in year t

Ait-1 = Total assets of company i in period t

NDAit = Non-discretionary accruals in year t

#### Ownership Concentration

The concept of "ownership concentration" is a share ownership structure in which an individual or minority group holds a large portion of shares, resulting in a relatively dominant percentage of share ownership compared to other shareholders. In a business context, ownership concentration can impact company performance and influence management decisions and business strategies.

*Ownership Concentration = The proportion of shares held by the largest shareholder*

**Source:** (Ade Putra et al., 2022)

#### Institutional Ownership

Shares held by government agencies, trust funds, financial institutions, legal companies, foreign institutions, and other organizations as of the end of the fiscal year are considered to be

owned by institutions. The percentage of shares held by these institutions—including shares of both local and foreign corporations and governments—is added up to determine this variable.

$$\text{Institutional Ownership} = \frac{\text{Total stocks owned by institution}}{\text{Total circulated stocks}}$$

**Source:** (Al-Saidi & Al-Shammari, 2015)

#### Managerial Ownership

Management ownership, as it pertains to the shares held by a company's management, is defined as the proportion of shares owned by management relative to the total number of outstanding shares.

$$\text{Managerial Ownership} = \frac{\text{Number of Shares Owned by the Management}}{\text{Total outstanding shares}}$$

**Source:** (Agustia et al., 2019)

#### Family Ownership

Family ownership refers to share ownership by families that have significant influence in managing the company. Family ownership is often associated with a desire to maintain control and family legacy, which may drive accrual earnings management (AEM) practices to maintain a favorable financial performance.

$$\text{Family Ownership} = \frac{\text{Total Family Stocks}}{\text{Total Circulated Stocks}}$$

**Source:** (Al-Saidi & Al-Shammari, 2015)

The data will be analyzed using a multiple linear regression model. To ensure the model provides accurate predictions and unbiased estimates, it must satisfy a set of classical assumptions. These assumptions include tests for normality, multicollinearity, heteroscedasticity, and autocorrelation (Al-Saidi & Al-Shammari, 2015).

According to (Agustia et al., 2019), the normality test evaluates whether the residuals from the model follow a normal distribution. Residuals are considered normally distributed if their distribution is close to or exactly normal. The model meets the normality assumption if the probability value (Sig.) exceeds 0.05.

The multicollinearity test evaluates the degree of correlation between the independent variables in the regression model. High correlation between independent variables is not what you want to see in a well-specified regression model. Tolerance values or the variance inflation factor (VIF) are used to assess multicollinearity. Multicollinearity is indicated by a tolerance of less than 0.1 or a VIF value more than 10 (Ade Putra et al., 2022).

Homoscedasticity is tested to determine if the variance of residuals remains consistent across all observations. Homoscedasticity occurs when the residual variance is constant, while heteroscedasticity arises if it varies. A model is considered satisfactory if it demonstrates homoscedasticity and does not exhibit heteroscedasticity (Agustia et al., 2019).

Multiple linear regression is the main analytical technique used, and it looks at the relationship on a continuous scale between one or more independent variables and one or more dependent variables. A trustworthy linear regression model can only be built using data that satisfies traditional assumptions (Nugroho & Muid, 2024). Testing of the hypothesis is done when a linear relationship has been established. The three main tests used in multiple linear regression analysis are the t test, the F test, and the coefficient of determination (R<sup>2</sup>), respectively.

The coefficient of determination (R<sup>2</sup>) is a numerical value that represents how well the model explains the variance in the dependent variable. Higher figures in the R<sup>2</sup> range suggest that a greater proportion of the variation can be explained by the independent variables. While a value near to 1

indicates that the independent factors predominantly explain the variation in the dependent variable, a low R2 signifies inadequate explanatory power (Salju et al., 2022).

The F statistic, also referred to as the model fit test, determines the overall fit of the regression model. The significant value in the SPSS regression result is investigated in this test. A well-fitting model is one in which the probability value of the F statistic is less than 0.05; a poor fit is indicated by a value greater than 0.05 (Masri, 2018).

The percentage of the variance in the dependent variable that each explanatory variable has to explain is found using the t test. Research hypotheses are assessed with this test. If the significance value of an independent variable is less than 0.05, it has a substantial (partial) impact on the dependent variable (Masri, 2018).

To assess the impact of the covid-19 pandemic on ownership structures and profit management tactics, pre- and post-covid data comparison is crucial. The subsequent sections provide an extensive analysis of the key statistical findings for both periods. The purpose of this comparison analysis is to shed light on how the epidemic has affected LQ 45 companies, family ownership, managerial ownership, earnings management, and institutional ownership patterns.

## RESULTS AND DISCUSSION

### Result

#### Descriptive Statical Test

Descriptive statistical analysis will be used to summarize the sample size, mean, standard deviation, maximum, and minimum values for each variable in the study. The results of this descriptive statistical analysis are detailed in Table 1.

**Table 1.** Descriptive Statical

Variable	Pre- Covid (2017-2019)					Post Covid (2019-2022)				
	N	Min	Max	Mean	Std. Deviation	N	Min	Max	Mean	Std. Deviation
Managerial	60	0.0000	0.1213	0.0072	0.0266	60	0.0000	0.2497	0.0166	0.0529
Institutional	60	0.4391	0.9250	0.6347	0.1295	60	0.4391	0.9250	0.6291	0.1327
Concentration	60	0.0000	1.0000	0.5758	0.2825	60	0.0000	0.9947	0.5736	0.2797
Family	60	0.0000	0.0664	0.0037	0.0145	60	0.0000	0.0334	0.0018	0.0063
Valid N	60					60				

The data reveals notable shifts in ownership structure before and after the covid-19 pandemic. Managerial ownership increased significantly in post-covid-19 era, reflecting a stronger role for managers in corporate governance, as seen by the rise in both mean and variability. Institutional ownership remained largely stable, indicating consistent participation by institutional investors, while ownership concentration showed minimal changes. However, family ownership experienced a marked decline in both average and variability, suggesting a diminishing influence of family shareholders in LQ-45 companies in post-pandemic period. This shift points to a growing professionalization of corporate governance, with less reliance on family ownership and more emphasis on managerial control.

The sample selection process relied on purposive sampling, focusing on manufacturing firms listed on the Indonesia Stock Exchange (IDX) within the LQ45 index from 2017 to 2022. The criteria for sample inclusion ensured that the chosen firms represented a diverse ownership structure (managerial, institutional, concentration, and family ownership) and were significantly impacted by the covid-19 pandemic. This purposive sampling allowed the study to examine earnings management practices under different ownership types pre- and post-covid-19, thus capturing any shifts due to economic disruption.



### Coefficient of Determination (R<sup>2</sup>)

**Table 2.** Model Summary

Model	Pre- Covid (2017-2019)				Post Covid (2019-2022)				
	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582	0.338	0.292	0.215	1.000	.825	0.681	0.651	0.152

Table 2 above shows that the Accrual-Based Earnings Management (AEM) model has a moderate association pre-covid, with an R value of 0.582 and an R<sup>2</sup> of 0.338, meaning 33.8% of the variance in AEM is explained by the predictors (family, institutional, concentration, managerial ownership). The Adjusted R<sup>2</sup> of 0.292 indicates a reasonable fit, with a Standard Error of 0.215. In post-covid period, the model's predictive power improves significantly, with an R of 0.825 and an R<sup>2</sup> of 0.681, explaining 68.1% of the variance in AEM. The Adjusted R<sup>2</sup> of 0.651 and lower Standard Error (0.152) suggest a stronger model fit, highlighting a significant influence of the predictors on AEM during post-pandemic period.

### ANOVA Test

**Table 3.** ANOVA

Model	Pre- Covid (2017-2019)					Post Covid (2019-2022)				
	Sum of Squares	df	Mean Square	F	Sig.	Sum of Squares	df	Mean Square	F	Sig.
Regression	10.225	4	2.556	6.589	.000 <sup>b</sup>	3.742	4	0.9355	12.583	.0004 <sup>b</sup>
Residual	20.345	55	0.370			1.118	55	0.0203		
Total	30.570	59				4.86	59			

a. Dependent Variable: AEM

b. Predictors: (Constant), Family, Institutional, Concentration, Managerial

The regression model's statistical significance is displayed in the ANOVA table. Table 3 shows that the regression model is statistically significant in both pre- and post-covid periods. Pre-covid, the F-statistic is 6.589 with a p-value of 0.000, indicating that the predictors (family, institutional, concentration, managerial ownership) collectively have a significant impact on AEM. The regression explains a large portion of the variance in AEM, with a Sum of Squares of 10.225 and a Mean Square of 2.556. Post-covid, the model's explanatory power improves, with a higher F-value of 12.583 and a p-value of 0.0004, showing an even stronger influence of the predictors on AEM. The lower residual mean square (0.0203) also indicates that the model captures more of the variance in AEM post-COVID.

### T-Test

**Table 4.** Coefficients

Model	Pre- Covid (2017-2019)		Post Covid (2019-2022)	
	Coefficient	Sig.	Coefficient	Sig.
(Constant)	-2.743	0.008	-3.124	0.0032
Managerial	1.798	0.0800	2.936	0.0050
Institutional	-1.592	0.1160	-3.434	0.0010
Concentration	2.827	0.0060	3.014	0.0040

Family                                      -0.527                                      0.6000                                      3.579                                      0.0008

Table 4 presents the coefficients from the T-Test, illustrating the impact of various ownership structures on Accrual Earnings Management (AEM) across two periods: pre-covid (2017-2019) and post-COVID (2019-2022). The constant term shows a negative baseline effect on AEM in both periods, with coefficients of -2.743 (p = 0.008) pre-covid and -3.124 (p = 0.0032) post-covid, indicating consistent underlying conditions affecting AEM. For managerial ownership, the coefficient rises from 1.798 (p = 0.08) pre-covid, suggesting a positive influence that is not statistically significant, to 2.936 (p = 0.005) post-covid, reflecting a significant positive impact. Institutional ownership demonstrates a negative relationship, with a coefficient of -1.592 (p = 0.116) pre-covid, indicating no significant deterrence of aggressive earnings management practices, which becomes significantly negative at -3.434 (p = 0.001) post-covid, suggesting a stronger role in promoting conservative reporting. Ownership concentration shows a significant positive influence in both periods, with coefficients of 2.827 (p = 0.006) pre-covid and 3.014 (p = 0.004) post-covid, reinforcing its correlation with higher earnings management practices. Finally, family ownership shifts from a negligible negative influence of -0.527 (p = 0.6) pre-covid to a significant positive impact of 3.579 (p = 0.0008) post-covid, indicating a growing reliance on aggressive earnings management strategies in family-owned firms following the pandemic.

## Discussion

**Table 5.** Hypothesis Testing

Model	Pre- Covid (2017-2019)			Post Covid (2019-2022)		
	Coefficient	Sig.	Hypothesis Proving	Coefficient	Sig.	Hypothesis Proving
(Constant)	-2.743	0.008		-3.124	0.0032	
Managerial	1.798	0.0800	H <sub>1a</sub> : Rejected	2.936	0.005	H <sub>1b</sub> : Accepted
Institutional	-1.592	0.1160	H <sub>2a</sub> : Rejected	-3.434	0.001	H <sub>2b</sub> : Rejected
Family	2.827	0.0060	H <sub>3a</sub> : Accepted	3.014	0.004	H <sub>3b</sub> : Accepted
Concentration	-0.527	0.6000	H <sub>4a</sub> : Rejected	3.579	0.000	H <sub>4b</sub> : Accepted

The analysis employs a T-Test to assess the significance of the coefficients associated with these ownership types in affecting AEM practices. For managerial ownership, the hypothesis H<sub>1a</sub> is rejected, indicating no significant but positive influence on AEM pre-covid-19, with a coefficient of 1.798 (p = 0.08). However, H<sub>1b</sub> is accepted in post-covid-19, showing a significant positive effect on AEM with a coefficient of 2.936 (p = 0.005). In terms of institutional ownership, H<sub>2a</sub> is rejected as it shows a non-significance and negative influence (coefficient of -1.592, p = 0.116), while H<sub>2b</sub> is also rejected post-covid-19, with a significant negative impact on AEM (coefficient of -3.434, p = 0.001). Ownership concentration reveals similar dynamics; H<sub>4a</sub> is rejected with a non-significance and negative influence (coefficient of -0.527, p = 0.6), while H<sub>4b</sub> is accepted post-covid-19, indicating a significant positive influence on AEM (coefficient of 3.579, p = 0.0008). Lastly, for family ownership, both hypotheses H<sub>3a</sub> and H<sub>3b</sub> are accepted, indicating a significant positive influence on AEM in both periods, with coefficients of 2.827 (p = 0.006) and 3.014 (p = 0.004), respectively.

### Managerial Ownership

The descriptive statistics indicate a significant increase in managerial ownership post-covid, with the mean value rising from 0.00721 in the pre-covid period to 0.01669 in the post-covid period. The T-Test results further illuminate this change: hypothesis H<sub>1a</sub> was rejected for the pre-covid

period (coefficient = 1.798,  $p = 0.08$ ), signifying no substantial positive influence on AEM. Conversely,  $H_{1b}$  is accepted in the post-covid analysis (coefficient = 2.936,  $p = 0.005$ ), demonstrating a marked positive impact on AEM.

### **Institutional Ownership**

In contrast, institutional ownership exhibited stability, with mean values of 0.63475 pre-covid and 0.62919 post-covid. The T-Test results reveal a consistent pattern: hypothesis  $H_{2a}$  was rejected (coefficient = -1.592,  $p = 0.116$ ) in the pre-covid period, indicating no significant influence on AEM. Similarly,  $H_{2b}$  was rejected post-covid (coefficient = -3.434,  $p = 0.001$ ), demonstrating a significant negative impact on AEM. This negative association suggests that institutional investors may emphasize governance and ethical financial practices, leading to a decrease in aggressive earnings management strategies (Koh., 2003).

### **Family Ownership**

Family ownership demonstrated a significant decline in both mean and variability, with a reduction from 0.0037 pre-covid to 0.00181 post-covid. The T-Test results highlight this change: hypothesis  $H_{3a}$  was rejected (coefficient = -0.527,  $p = 0.6$ ) in the pre-covid period, indicating no significant positive influence on AEM. However, in the post-covid analysis, hypothesis  $H_{3b}$  is accepted (coefficient = 3.579,  $p = 0.0008$ ), revealing a significant positive influence on AEM. This shift suggests that family-owned firms have increasingly relied on earnings management strategies in the post-pandemic landscape, possibly as a response to the need for improved financial performance amid market challenges (Ma and Ma., 2024). The study uses multiple linear regression, ensuring model accuracy by testing key assumptions. Normality is confirmed if residuals have a significance level above 0.05, while multicollinearity is managed by checking tolerance ( $>0.1$ ) and VIF ( $<10$ ) to avoid excessive predictor correlation.

### **Ownership Concentration**

Ownership concentration showed a relatively stable mean, moving from 0.57583 pre-covid to 0.5736 post-covid. The T-Test outcomes reveal that hypothesis  $H_{4a}$  is accepted for the pre-covid period (coefficient = 2.827,  $p = 0.006$ ) and  $H_{4b}$  is also accepted for the post-covid period (coefficient = 3.014,  $p = 0.004$ ). This indicates a significant positive influence on AEM in both periods, suggesting that concentrated ownership structures may foster a higher propensity for earnings management, potentially driven by the interests of major shareholders (Shayan-Nia et al., 2017).

## **CONCLUSION AND SUGGESTION**

The analysis of the impact of ownership structures on Accrual Earnings Management (AEM) reveals significant shifts in dynamics before and after the covid-19 pandemic. The T-Test results indicate a consistent negative baseline effect on AEM across both periods, underscoring underlying corporate governance challenges. Notably, managerial ownership emerges as a critical factor in post-covid era, demonstrating a significant positive influence on AEM, reflecting a trend toward increased managerial control in corporate governance after the pandemic period. Conversely, institutional ownership has transitioned from a negligible impact pre-covid to a significant negative effect post-covid, suggesting that institutional investors are now playing a more pronounced role in encouraging conservative earnings reporting practices.

Family ownership has proven to be a stable predictor of AEM, consistently exhibiting a significant positive relationship in both periods. This reinforces the notion that family control can lead to a propensity for higher earnings management practices. On the other hand, ownership concentration has shifted dramatically; while it exhibited a negligible negative influence pre-covid, it has now emerged as a significant positive factor post-covid, indicating that largest shareholders may

increasingly adopt aggressive earnings management strategies in response to evolving market conditions.

In summary, these findings highlight the changing landscape of corporate governance and financial practices, revealing that ownership structures significantly influence AEM. As firms navigate the complexities of a post-pandemic economy, understanding these dynamics becomes crucial for stakeholders aiming to foster transparency and accountability in financial reporting. Future research should explore the implications of these trends and investigate how other factors, such as regulatory changes and market conditions, further affect the interplay between ownership and earnings management practices (Fuadah L.L., 2022).

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