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The prevalence and sectoral dynamics of earnings management: Evidence from the FBM KLCI

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Abstract---This study investigates the prevalence of earnings management among non-financial firms listed on the FTSE Bursa Malaysia KLCI (FBM KLCI) over the period from 2018 to 2022. Using discretionary accruals (DA) estimated through the Modified Jones Model, the research reveals a consistent trend of income-decreasing earnings management across the study period, with average DA values ranging between -0.00294 and -0.0034. Sectoral analysis shows significant variation in earnings management practices, with the technology sector demonstrating higher average DA values indicative of more aggressive financial reporting, while the construction sector displayed the most conservative behavior. The persistence of negative DA values, particularly during 2019–2021, coincides with the economic turbulence brought on by the COVID-19 pandemic, suggesting that firms engaged in income-decreasing strategies to smooth earnings, build financial resilience, and mitigate regulatory or stakeholder pressures. The significance of this study lies in its contribution to understanding how sector-specific characteristics and broader economic shocks influence financial reporting behavior in emerging markets. By providing empirical evidence from the Malaysian context, this research offers valuable insights for investors, regulators, and policymakers seeking to enhance corporate transparency and strengthen financial reporting standards.

Keywords---earnings management; modified jones model; FBM KLCI; sectoral analysis; COVID-19; financial reporting.

JEL Code---M41, M40, G30.

1. Introduction

In the global financial landscape, the prevalence of earnings management practices has sparked considerable academic inquiry into its drivers and implications. While some scholars view earnings management as a potentially beneficial tool for signaling private information or smoothing volatile earnings to present a more stable financial outlook (Healy & Wahlen, 1999), others argue that such practices may distort financial statements, undermine transparency, and erode stakeholder trust (Roychowdhury, 2006).

In Malaysia, this issue is particularly relevant given the country's efforts to enhance corporate governance and financial reporting standards in line with global best practices. Firms listed in the FTSE Bursa Malaysia Kuala Lumpur Composite Index (FBM KLCI) are central to the economy and often seen as benchmarks of corporate integrity and performance. Yet, research indicates that earnings management remains prevalent among Malaysian public firms, driven by factors such as ownership concentration, and managerial incentives (Al-Jaifi, 2017; Nuhu et al., 2023). These practices raise concerns about the reliability of reported earnings and their implications for investment decisions and policy oversight.

Despite increasing scholarly interest, the fundamental question of how widespread and sector-specific earnings management practices are within the Malaysian capital market remains insufficiently explored. Prior studies often adopt an aggregate approach to firm behavior, with limited focus on how earnings management patterns differ by sector or evolve over time. There is a notable gap in understanding whether certain industries within the FBM KLCI are more prone to such practices, and how shifts in regulatory frameworks or corporate governance reforms may influence their prevalence (Al-Zaqeba et al., 2022).

This study seeks to fill these gaps by examining the extent and variation of earnings management across sectors and time periods among firms listed in the FBM KLCI. Through this lens, the research aims to determine whether earnings management is present on the firm and sectorial levels in the FBM KLCI.

To guide this investigation, the study addresses the following research questions:

1. Do firms listed in the FBM KLCI engage in earnings management practices?
2. Do earnings management practices vary across different sectors within the FBM KLCI??

Research Objectives

This study focuses exclusively on firms listed in the FTSE Bursa Malaysia Kuala Lumpur Composite Index (FBM KLCI) and aims to:

1. Determine the prevalence of earnings management practices among FBM KLCI-listed firms.
2. Identify and compare the levels of earnings management across different sectors represented in the FBM KLCI.

Significance of the Study

This study is significant as it provides focused insight into the prevalence of earnings management among Malaysia's most prominent public companies—the firms listed in the FBM KLCI. By highlighting sectoral variations and identifying patterns in financial reporting behavior, the research offers practical value to investors concerned with earnings quality, regulators seeking to strengthen disclosure standards, and corporate leaders aiming to uphold transparent governance. It also contributes to academic discourse by addressing a gap in the Malaysian earnings management literature, offering empirical evidence specific to the country's top-tier firms and industry segments.

2. Literature review and hypothesis Development

Several Earnings management practices have been the subject of much research in previous studies due to their impact on financial transparency, investor confidence, and financial markets. The prevalence of earnings management practices is a global phenomenon, as evidenced by studies conducted in various regions of the world. In an international context, Ater and Hansen, (2020) conducted an empirical study aimed at assessing the extent to which firms engage in earnings management prior to private debt issuance. The researchers relied on a sample of 37,525 observations from the Compustat database, including 9,434 private debt issuances. The results showed that firms, on average, resort to earnings management to increase income in the period preceding a new private debt issuance. This behavior is more pronounced in firms with a history of increasing income in previous years through earnings management. However, the study also confirmed that reputational concerns act as a barrier to management decisions regarding earnings management prior to private debt issuance. In the Americas, Chen et al., (2020) explored the impact of investor protection, market oversight, and stock liquidity on earnings management in 34 countries, using a sample of 430 firms whose shares were represented in the form of ADRs on US stock exchanges. The results revealed that these firms practice earnings management, particularly in environments with less stringent legal safeguards and limited institutional oversight, and that firms are more likely to engage in earnings management practices when stock liquidity is high. The researchers justified these findings by suggesting that firms in highly liquid markets may have greater flexibility to adjust their financial reporting without causing drastic changes in stock prices.

In Asia, Viana et al., (2022) focused on emerging markets, examining the relationship between financial distress and accrual-based earnings management by applying multivariate analysis to a sample of 33,455 observations from 20 emerging Asian markets over a 20-year period. The results showed that companies facing greater financial distress tend to engage in accrual earnings management to increase income and present a more favorable picture of their

financial performance. The researchers also found that the Big Four audit firms play an important role in restricting such practices.

Turning to the GCC region, Alghemary et al., (2023) examined the relationship between acquisitions, ownership structure, accrual earnings management, and real earnings management using a sample of 255 companies (153 non-acquiring companies and 102 acquiring companies) and 1,892 observations from 2007 to 2017. The results of a fixed-effect regression model showed that accrual earnings management has a positive relationship with real earnings management. This suggests that acquiring companies in the GCC use both real and accrual earnings management mechanisms as complementary strategies. This finding supports the argument that firms cannot engage in accrual earnings management alone, regardless of the cost associated with engaging in real earnings management, because accrual earnings management occurs at the end of the financial year, when firms have limited time to prepare financial statements.

In the European region, Christopoulos et al., (2022) investigated the impact of corruption on real and accrual earnings management for firms involved in mergers and acquisitions during the period 2010-2020, in addition to assessing earnings management behavior two years prior to the announcement of these deals. The results showed a systematic pattern of earnings-reducing accounting manipulation practices, while real earnings management was not significantly affected by the corruption variable. The researchers argue that in transparent economies, managers may prefer to manipulate real activities, perceiving them as less detectable than traditional accounting procedures. Shifting the focus to the African continent, and relying on a sample of 112 banks from 20 African countries spanning the period from 2011 to 2017, Pinto et al., (2019) explored the role of corporate governance mechanisms and foreign direct investment (FDI) in influencing the use of loan loss provisions (LLPs) to smooth income. After estimating models using the pooled least squares (POLS) method and the generalized method of moments (GMM), the researchers found that bank managers used LLPs to mitigate income volatility, suggesting that earnings management is a tool relied upon to mitigate variability in reported income, with the aim of presenting a more stable and predictable picture of a firm's financial performance.

The prevalence of earnings management practices varies across countries, as evidenced by numerous studies examining diverse economic contexts. In Brazil, da Silva Flores et al., (2023) evaluated the impact of the COVID-19 pandemic on earnings management. The researchers found that Brazilian firms exhibited a significant proportion of discretionary accruals during the crisis, suggesting greater incentives for earnings manipulation during crises in emerging economies. In contrast, Elsalem et al., (2023) focused on the United Kingdom and found that the implementation of the UK Companies Act 2006 led to changes in both real earnings management practices and accruals. This demonstrates a direct link between the legal framework and earnings management practices in advanced economies.

Similarly, Garfatta et al., (2023) investigated earnings management in Tunisia during the COVID-19 outbreak. The researchers found that Tunisian firms used

discretionary earnings-reducing accruals, and that the COVID-19 variable negatively impacted real earnings management, but this effect was relatively weaker and less pronounced. These findings suggest that Tunisian firms trade off earnings management approaches and do not rely heavily on real earnings management during crises.

In Australia, Tham et al., (2019) investigated the impact of multiple board members on earnings management and found that firms with board members who do not hold multiple managerial positions exhibit higher levels of earnings management. Furthermore, in India, Mangala and Dhanda, (2021) examined earnings management practices during initial public offerings (IPOs). The results of their study revealed abnormally high levels of earnings management during the issuance year, showing that profitability, age, and size of the issuing company significantly influence pre-issue and issue-year earnings management. This demonstrates the prevalence of earnings management practices during critical financial events such as initial public offerings (IPOs) in the Indian context. Overall, these studies emphasize the importance of considering country-specific economic conditions, regulatory frameworks, and institutional factors when analyzing the prevalence of earnings management practices and the motivations behind them.

Several studies have also examined the prevalence of earnings management in Malaysia, highlighting the various factors influencing this financial practice. Abdul Rahman and Wan (2005) investigated the performance of companies with initial public offerings in Malaysia. Their study, which focused on 187 companies that went public between 1989 and 1998, revealed that these companies experienced significant negative stock returns over the long term. Although there is evidence of pre-IPO earnings management practices, no statistically significant relationship has been observed between pre-IPO earnings management and long-term post-IPO performance. Researchers attribute this post-IPO share price decline to price corrections by investors based on subsequent financial statements and media reports.

Turning to Shariah-compliant companies, Mohd Suffian et al., (2020) investigated the financial performance of these entities in Malaysia, taking into account the impact of earnings management, free cash flow, and industry specialization. Analyzing data from 2009 to 2011, the study found that Shariah-compliant companies improved their financial performance through free cash flow and earnings management practices. However, it was noted that the industry variable did not clearly categorize the outperformance of a particular industry over others.

Regarding fraudulent activities, Md Nasir et al., (2018) examined the management of actual earnings and accruals prior to the year in which companies committed fraud in Malaysia. Their study covered the period from 2001 to 2008 and found that companies that committed financial statement fraud had also manipulated production costs in the years preceding the fraud. Notably, these companies preferred to manipulate accruals over actual earnings prior to the year of the fraud. The researchers argue that these companies' preference for manipulating accruals over actual earnings is a strategic choice, believing that earnings management based on accruals is less likely to be detected by authorities.

In examining environmental considerations, Mohd-Sabrun and Muhamad, (2023) took a sector-based approach, investigating earnings management practices in environmentally sensitive (ESS) and environmentally non-sensitive (ENS) sectors in Malaysia from 2008 to 2017. The results showed that ESS sectors were more likely to engage in earnings management than ENS sectors. Considering industry characteristics, Wasiuzzaman, (2018) evaluated earnings management across different industries in Malaysia from 2005 to 2012. The study, which covered 13 different industries, determined that industry characteristics such as capital intensity and profitability significantly influenced the levels of earnings management practices in these firms.

The primary objective of the study conducted by Mohamad et al., (2020) was to analyze the relationship between corporate governance (CG) characteristics and earnings management (EM) in Malaysian government-linked companies (GLCs). Data were collected from two distinct periods: the first in 2003, representing the pre-transition policy period, and the second in 2006, representing the post-transition policy period, during which the Malaysian government undertook a restructuring of the companies under its control. The results revealed an increase in earnings management activities during the post-transition period. This indicates an increase in earnings manipulation following the restructuring initiatives implemented by the Malaysian government. Furthermore, despite the implementation of CG measures, no significant impact on EM activities was found during the post-transition period.

In the same context, Abdullah, (2022) studied the role of board independence and audit committee expertise in mitigating earnings management. The results of the study, which spanned from 2012 to 2014, showed that small listed companies have a high propensity to manipulate accruals. This finding indicates the ineffectiveness of the corporate governance framework implemented for Malaysian companies in mitigating manipulation practices.

Finally, in the context of crises, specifically financial distress and the COVID-19 pandemic, Zamri et al., (2022) explored the approach adopted by financially distressed companies to earnings management in Malaysia. Analyzing data from 2018 to 2021, the study found that financially distressed companies engaged in real earnings management practices rather than accrual earnings management, specifically through abnormal cash flows from operations and abnormal discretionary expenses. In a similar vein, Ayedh et al., (2019) focused on understanding earnings management behavior in Malaysia during the 2008 financial crisis. By examining the magnitude and direction of earnings management, the study compared these behaviors with those observed during the pre-crisis period, two years after Malaysia adopted International Financial Reporting Standards (IFRS). The empirical results, based on t-tests on a sample of 1,189 observations, revealed a shift in earnings management practices. During the crisis period (2008 and 2009), Malaysian firms exhibited earnings-reducing practices, in contrast to the pre-crisis period (2005 and 2006), when earnings-increasing practices were aimed at increasing earnings. This suggests a shift in earnings management practices by Malaysian firms during challenging economic times.

Based on this literature, the following hypotheses are proposed:

H₁: Firms listed in the FBM KLCI engage in earnings management practices., given that the average of discretionary accruals (DA) is different from zero.

H₂: Earnings management practices vary across different sectors within the FBM KLCI., as reflected by variations in average discretionary accruals (DA) between sectors.

3. Methods

This chapter outlines the methodology adopted to examine the prevalence of earnings management among non-financial firms listed on the FTSE Bursa Malaysia KLCI (FBM KLCI). The main objective is to assess the extent of earnings management practices using the discretionary accruals (DA) derived from the Modified Jones Model. This chapter provides a detailed description of the research design, data sources, the study population, variable measurements, and analytical techniques employed to meet the objectives of the study.

3.1 Research Design

The study adopts a quantitative, descriptive design, relying on numerical and financial data to explore earnings management trends. The approach is suitable for identifying patterns and variations in earnings management behavior across firms and sectors using measurable financial indicators, such as discretionary accruals.

The primary goal is to assess the extent to which firms listed on the FBM KLCI engage in earnings management activities, as indicated by the calculated discretionary accruals based on the Modified Jones Model, across different sectors and firm characteristics throughout the study period.

3.2 Study Period and Scope

The study covers a five-year period from 2018 to 2022. This time frame was selected to capture:

- The impact of regulatory changes in Malaysia in 2018 aimed at reducing earnings management practices.
- The effect of COVID-19 and associated economic stimulus measures from 2020 to 2022.
- Recent trends in earnings management behavior under economic uncertainty.

The scope is limited to non-financial firms due to the distinct accounting and financial structures of banks and insurance companies, which could bias the results.

3.3 Study Population

The population comprises all firms listed on the **FBM KLCI**, which includes the 30 largest and most liquid public companies on Bursa Malaysia [Look to the table ()]. After excluding financial firms, a **sample of 24 non-financial firms from 12 different sectors** was selected for analysis.

These firms were chosen because they represent a diverse range of industries and have complete, publicly available financial data over the five-year period.

Table (3.3.1): Study population

Stock Code	Firms Name	Sector Activity	No
AAGB MAIN	Axiata Group Bhd	communications	1
HARISAN MAIN	The Star Media Group Bhd	Media	1
IPEG MAIN	IJM Corporation Bhd	Constructions	1
GENTING MAIN	Genting Bhd	consumer entertainment	2
GENTINGM MAIN	Genting Malaysia Bhd	consumer entertainment	
INVOLUCAS MAIN	Involve Capital Bhd	Technology	2
MYEG MAIN	MYEG Services Bhd	Technology	
MAYBANK MAIN	Malayan Banking Berhad	Financial services	-6
CIMB MAIN	CIMB Group Holdings Bhd	Financial services	
PUBLIC MAIN	Public Bank Bhd	Financial services	
LPI MAIN	London Life Pacific Insurance Berhad	Financial services	
RHBCAP MAIN	RHB Bank Bhd	Financial services	
UOBKH MAIN	UOB Kay Hian Holdings Bhd	Financial services	2
BHPET MAIN	Boustead Plantations Bhd	Agriculture	
SIME MAIN	Sime Darby Plantation Bhd	Agriculture	1
SIMEPLB MAIN	Sime Darby Property Bhd	Real estate	
HARTA MAIN	Boustead Holdings Bhd	diversified	1
TNB MAIN	Tenaga Nasional Berhad	Public facilities	1
KLK MAIN	Kuala Lumpur Kepong Berhad	Consumer Products and Services	6
MAXIS MAIN	Maxis Bhd	Consumer Products and Services	
NESTLE MAIN	Nestle Malaysia Bhd	Consumer Products and Services	
BATAS MAIN	BATA (Malaysia) Bhd	Consumer Products and Services	
PPB MAIN	PPB Group Bhd	Consumer Products and Services	
TOP GLOV MAIN	Top Glove Corporation Bhd	Consumer Products and Services	
IOICORP MAIN	Ioi Corporation Berhad	Industrial products and services	5
PRESS METAL MAIN	Press Metal Aluminium Holdings Bhd	Industrial products and services	
BEM MAIN	Berjaya Energy Bhd	Industrial products and services	
TAMINCO MAIN	Taminco Bhd	Industrial products and services	

BHANGI MAIN	Bangi Aluminium Bhd	Industrial products and services	
PETGAS MAIN	Petronas Gas Bhd	Oil and gas	1
Total number of Firms listed in the index			30
Total number of financial Firms			6-
Total number of Firms in the population			24

Source: Prepared by the researcher based on <https://topforeignstocks.com>

3.4 Data Collection

Data were gathered from two main sources:

- Annual financial statements and reports published on the firms' official websites and Bursa Malaysia's portal.
- Yahoo Finance, which was used to cross-check financial information. Only audited and published financial statements were used to ensure the reliability and consistency of the data.

3.5 Measurement of Earnings management

This study applies the **Modified Jones Model** (Dechow et al., 1995), one of the most widely accepted models for estimating discretionary accruals. The steps are as follows:

• 3.5.1 Calculation of Total Accruals (TA)

$$TA_{i,t} = NI_{i,t} - CFO_{i,t}$$

Where:

- $TA_{i,t}$: Total accruals for firm i in year t
- $NI_{i,t}$: Net income
- $CFO_{i,t}$: Cash flow from operations

3.5.2 Step 2: Estimation of Non-Discretionary Accruals (NDA)

The following regression is estimated for each industry-year:

$$TA_{i,t} / A_{i,t-1} = \alpha_1 (1/A_{i,t-1}) + \alpha_2 ((\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1}) + \alpha_3 (PPE_{i,t} / A_{i,t-1}) + \varepsilon_{i,t}$$

Where:

- $\Delta REV_{i,t}$: Change in revenues
- $\Delta REC_{i,t}$: Change in receivables
- $PPE_{i,t}$: Gross property, plant, and equipment
- $A_{i,t-1}$: Total assets at the beginning of the year
- $\varepsilon_{i,t}$: Error term

The estimated coefficients $\alpha_1, \alpha_2, \alpha_3$ are then used to calculate **Non-Discretionary Accruals (NDA)**:

$$NDA_{i,t} = \alpha_1 (1 / A_{i,t-1}) + \alpha_2 ((\Delta REV_{i,t} - \Delta REC_{i,t}) / A_{i,t-1}) + \alpha_3 (PPE_{i,t} / A_{i,t-1})$$

3.5.3 Step 3: Calculation of Discretionary Accruals (DA)

$$DA_{i,t} = TA_{i,t} - NDA_{i,t}$$

The positive value of DA will be used as the final proxy for profit increasing earnings management and negative value of DA will be used as the proxy for profit decreasing earnings management.

3.7 Sectoral Classification

To explore differences across industries, each firm was classified according to its sector, following Bursa Malaysia's industry classification system. Average Cash-ETR and Current-ETR were computed **per sector** to assess which industries exhibited the strongest tax avoidance behavior over the period studied.

3.8 Data Analysis Techniques

The data analysis was conducted in three main steps:

1. **Descriptive Statistics:** Means, minimums, and maximums of DA were calculated to describe the general tax behavior of the firms.
2. **Comparison:** The mean values of DA were compared with zero to detect evidence of earnings management.
3. **Sector-Level Analysis:** Sector averages were compared to identify industries with higher or lower tendencies toward earnings management practices. Visual aids such as diagram charts and were used to highlight variations.

4. Results

This section presents the most important descriptive statistics to provide a detailed overview of the characteristics of the study variables using tables and graphs. It also objectively reports the results of hypothesis testing, paving the way for a detailed discussion of these results in the next section.

4.1.1 Descriptive Statistics

A descriptive statistical analysis was conducted to obtain an overview of the primary characteristics of the variables studied and included in the research model. The analysis includes mean values, minimum values, maximum values, and standard deviations. Table 4-1 presents the results of the descriptive statistical analysis.

variables Table (4.1.1): Descriptive statistics for DA (2018-2022)

Variables	N	Std	Mean	Max	Min
DA	120	657.5540303	-3.70803	2554.268	-1079.68
Valid N (listwise) 120					

Source: Prepared by the researcher based on Excel

The descriptive statistics for discretionary accruals (DA) show an average of -3.71, indicating a tendency toward income-decreasing earnings management among FBM KLCI firms. The high standard deviation (657.55) and wide range (from -1079.68 to 2554.27) suggest substantial variation and the presence of extreme values. This reflects the diverse earnings management behaviors across firms and highlights the need for sector-specific investigation.

4.1.2 Results of Testing the First Hypothesis

To test the second hypothesis (**H₁**), which states that " Firms listed in the FBM KLCI engage in earnings management practices., given that the average of discretionary accruals (DA)is different from zero," the researcher conducted a descriptive statistical analysis of discretionary accruals over the study period. Table (4-4) [see also Figure (4-4)] presents the statistics for discretionary accruals (DA).

Table (4.1.2.1): The prevalence of earnings management in the population (2018-2022)

	2018	2019	2020	2021	2022
Mean	-0.00295	-0.00069	-0.005	-0.006	-0.003
Std	0.668	0.677	0.646	0.688	0.663
Min	2.503	2.554	2.428	2.554	2.486
Max	-1.027	-1.031	-0.989	-1.079	-1.022

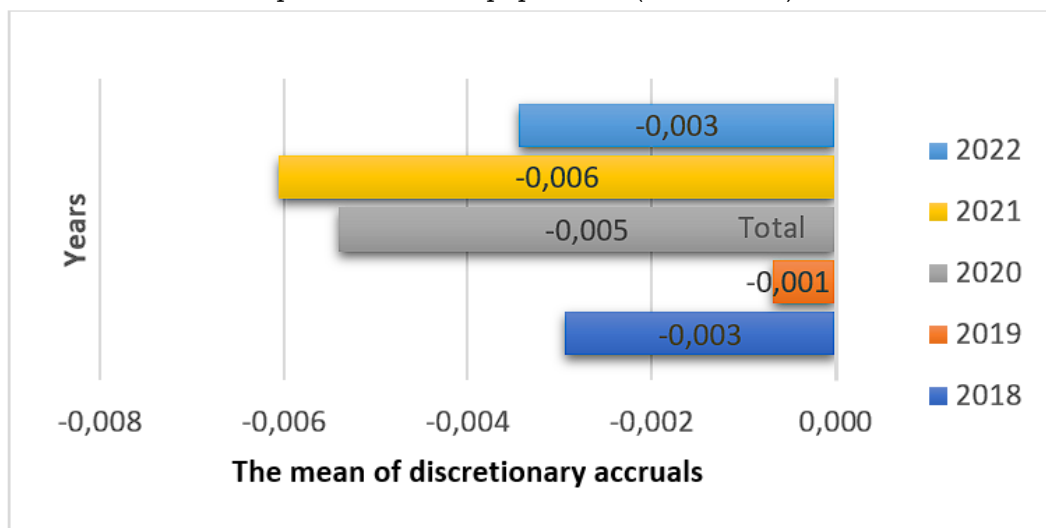
Source: Prepared by the researcher based on Excel

Descriptive statistics for discretionary accruals (DA) as a measure of earnings management over the study period (2018 to 2022) for companies listed on the FBM KLCI of Bursa Malaysia provide insight into the prevalence of earnings management practices in the sample. The average DA values show a negative trend over the study period, indicating that companies, on average, tend to adopt earnings management strategies aimed at reducing reported income. In 2018, the average DA was -0.00294, followed by a slight decline in 2019 (-0.00069). Subsequent years (2020 and 2021) saw a more pronounced increase followed by a decline in 2022, with average DA values reaching -0.0054, -0.0060, and -0.0034, respectively.

The standard deviation of DA, which represents the degree of variability in discretionary accruals (earnings management), is relatively low (ranging from 0.646 to 0.688) compared to the range (-1.079 to 2.554) over the study period. The low standard deviation of discretionary accruals indicates no significant differences in earnings management practices among the companies included in the FBM KLCI. This may be an indication of a common or systematic strategy in financial reporting practices within the sample.

The maximum and minimum values of DA provide further clarification, with the maximum reaching 2.554 in 2019 (Axiata Group Bhd) and the minimum reaching -1.079 in 2021 (Press Metal Aluminium Holdings Bhd). Taken together, these statistics mostly point to a consistent pattern of income-reducing earnings management strategies among companies listed on Bursa Malaysia's FBM KLCI, as demonstrated by the relatively stable mean DA values and standard deviations over the years examined.

Figure (4.1.2.1): A diagram illustrating the prevalence of earnings management practices in the population (2018-2022)



Source: Prepared by the researcher based on Excel

After analyzing the average discretionary accruals for the years 2018-2022, our findings reveal statistical evidence that discretionary accruals, on average, are significantly different from zero ($\neq 0$). This supports the hypothesis that companies listed on the FBM KLCI Bursa Malaysia practiced earnings management during the study period. It can also be argued that these companies, on average, managed earnings with the aim of reducing reported earnings. Therefore, hypothesis **H₁ is accepted**.

4.1.2 Results of Testing the First Hypothesis

Standard deviations (Std) also reveal the degree of variation in tax avoidance practices. For both Cash-ETR and Current-ETR, the standard deviation values indicate relatively stable patterns over the five-year period, with minor fluctuations.

Table (4.1.2.1): The prevalence of earnings management in the population by industrial specialization (2022-2018)

Sector	2018	2019	2020	2021	2022
Consumer Products & Services	-199.56	-	-	-	-
Industrial Products & Services	-	-	-	-	-
Technology	-	-	-	-	-
Plantations	-	-	-	-	-
Public Utilities	-	-	-	-	-
	199.104	370.492	345.381	352.597	385.766
	200.399	195.273	-372.04	361.193	370.492
	195.273	206.178	355.017	362.484	372.158
	206.178	199.104	344.232	364.148	360.357

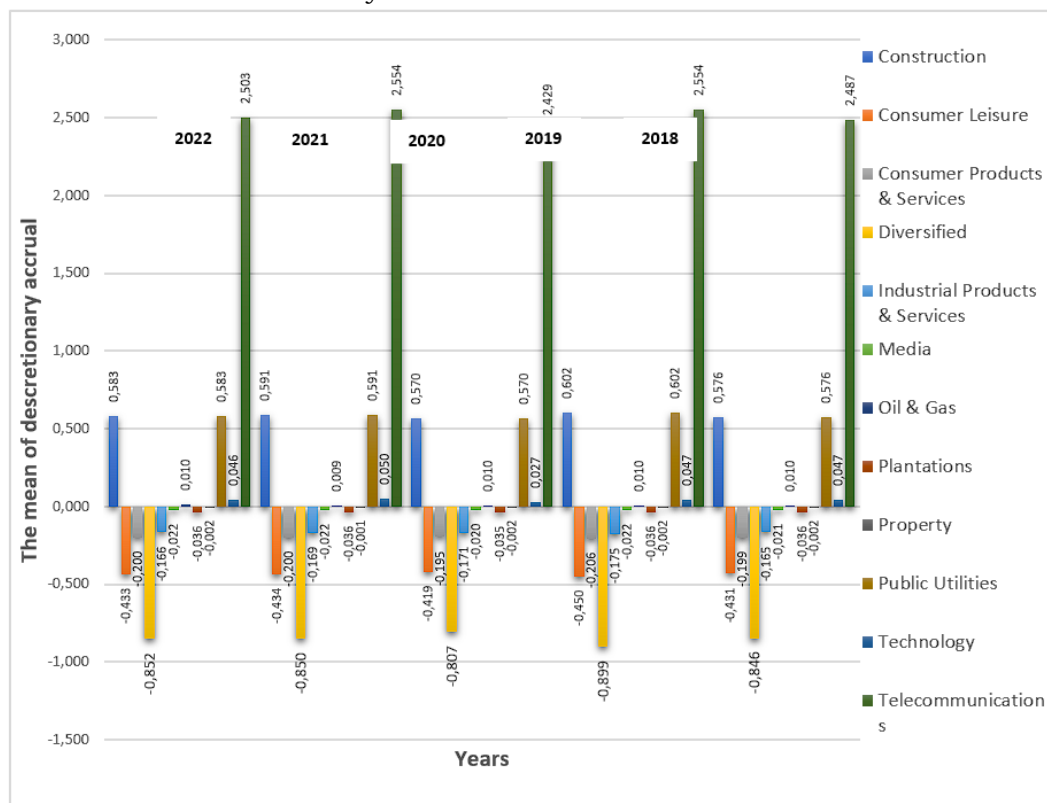
	-	-	-	-	-
Consumer Leisure	370.492	372.158	334.035	-377.76	369.586
	-	-	-	-	-
Diversified	372.158	360.357	358.986	361.555	227.894
	-	-	-	-	-
Construction	360.357	385.766	343.348	199.709	229.085
	-	-	-	-	-
Telecommunications	385.766	369.586	42.7067	200.696	-221.95
	-	-	-	-	-
Oil & Gas	369.586	227.894	-43.185	193.396	-237.22
	-	-	-	-	-
Media	227.894	229.085	43.5916	208.731	227.505
	-	-	-	-	-
Consumer Leisure	229.085	-221.95	42.8693	198.957	205.459
	-	-	-	-	-
Property	-221.95	-237.22	43.0435	-190.26	206.541

Source: Prepared by the researcher based on Excel

An examination of the average discretionary accruals (DA) across sectors listed in the FBM KLCI over the study period reveals variations in the extent of earnings management. For instance, the utilities sector consistently reported negative DA values between 2018 and 2022, with a rising trend ranging from -199.104 to -385.766. These increasingly negative values suggest a growing inclination toward income-decreasing earnings management practices in the sector over time.

In the case of the consumer products and services sector, DA values also remained consistently negative but varied in magnitude across the five-year period. DA rose from -199.56 in 2018 to a peak of -377.604 in 2021, before declining to -199.104 in 2022. These fluctuating negative levels indicate varying degrees of engagement in income-decreasing earnings management practices within the consumer products and services sector throughout the study period.

Figure (4-5): A graph showing the prevalence of earnings management practices by sector from 2018 to 2022



Source: Prepared by the researcher based on Excel.

In the consumer entertainment sector, discretionary accruals (DA) exhibited a fluctuating pattern between 2018 and 2022. From 2018 to 2021, the sector experienced a decline in DA values (from -229.085 to -42.8693). However, this trend reversed in the following year, with DA decreasing again from -42.8693 in 2021 to -205.459 in 2022. These fluctuating negative DA values initially declining and then rising suggest that companies in the consumer entertainment sector actively employed discretionary accruals to reduce reported earnings throughout the observed period. The upward shift after 2021 indicates a potential change in financial reporting strategies, possibly reflecting new circumstances or motivations behind earnings management practices.

Based on the sectoral analysis of discretionary accruals (DA), which revealed distinct patterns and varying magnitudes of income-decreasing earnings management across different sectors within the FBM KLCI, Therefore, hypothesis **H₂ is accepted.**

5. Discussion

5.1 Discussion of the Earnings management prevalence in firms listed on the FBM KLCI

The analysis of average discretionary accruals (DA) for the period 2018–2022 revealed that, on average, DA values significantly differ from zero ($\neq 0$) and exhibit a consistent negative direction, ranging between -0.00294 and -0.0034 throughout the study years. This indicates that firms listed on the FBM KLCI engage in earnings management practices aimed at reducing reported income. These findings align with those of Flayyih & Khiari (2022), Ji Sang Hyun et al. (2019), Kliestik et al. (2021), Pham et al. (2019), Poradova (2021), and also with Ayedh et al. (2019), who analyzed 1,189 observations and documented a shift in earnings management strategies among Malaysian firms—from income-increasing in the pre-crisis years (2005–2006) to income-decreasing during the crisis period (2008–2009), with more negative or less positive practices observed throughout the crisis.

This income-decreasing behavior may be interpreted as a strategic response to major economic events and policy changes in Malaysia. Notably, the drop in average DA in 2019 coincides with the onset of the COVID-19 pandemic, which prompted the Malaysian government to implement economic stimulus packages. This period of economic disruption likely motivated firms to adopt conservative reporting strategies, as reflected in the continued negative trend in average DA. The relatively small fluctuations in DA averages further support the notion of income smoothing, suggesting that firms aimed to project financial stability amid economic uncertainty.

The prevalent use of negative DA values indicates a deliberate effort by companies to reduce reported earnings, consistent with the principle of prudence. This approach may have been driven by multiple considerations, such as avoiding political costs associated with high reported profits during crises, reducing tax burdens, and deferring retained earnings to buffer low-performance periods—thus presenting more stable financial outcomes. Additionally, negative DA may have been strategically used to manage or minimize employee compensation claims during periods of economic downturn.

5.2 Discussion of the Earnings management Prevalence by Sector

During the study period, the sectoral analysis of discretionary accruals (DA) reveals notable disparities in the prevalence of earnings management practices across different industries within the FBM KLCI. Consistent with findings by Kothari et al. (2005) and Callao et al. (2014), the technology sector in this study exhibited persistently high average DA values, indicating a sustained inclination toward manipulating reported earnings. This trend may be attributed to the sector's competitive intensity, performance volatility, and pressure to demonstrate consistent growth—factors previously linked to aggressive earnings management strategies (Dechow & Dichev, 2002).

In contrast, the construction sector consistently recorded the lowest average DA values, reflecting a more conservative and transparent approach to financial

reporting. This finding aligns with the results of Jelinek (2007), who argued that firms in heavily regulated or capital-intensive sectors tend to exhibit more cautious reporting behavior to maintain investor confidence and comply with long-term project accountability. Furthermore, the relatively lower level of earnings management in this sector suggests a prioritization of earnings quality over short-term performance enhancement, echoing conclusions drawn by Cohen and Zarowin (2010) in their sector-based analysis.

The study also identified fluctuating patterns of DA in sectors such as consumer products and consumer entertainment, where earnings management appeared to intensify in certain years. These observations resonate with the work of Gunny (2010), who found that firms often engage in income-decreasing earnings management during periods of economic uncertainty or performance downturns as part of income-smoothing strategies. However, this finding contrasts with Roychowdhury (2006), who reported a more consistent use of real activity manipulation in consumer-driven sectors rather than accrual-based approaches.

On the other hand, the telecommunications sector demonstrated stable and moderate levels of DA, suggesting a more disciplined financial reporting approach. This aligns with the study by Ismail and Weetman (2008), who noted that firms in highly scrutinized sectors often exhibit restrained use of earnings management to maintain regulatory compliance and preserve reputational capital.

Overall, the results support the assertion that earnings management is sector-dependent, with industry-specific dynamics and institutional contexts shaping the extent and direction of such practices. These findings contribute to the broader literature by reinforcing the argument that the motivations and mechanisms for earnings management vary not only across firms but also across sectors.

6. Conclusion

This study has examined the pervasiveness of earnings management among companies listed on the FBM KLCI of Bursa Malaysia over the period from 2018 to 2022, with particular focus on sector-specific trends and macroeconomic influences. By measuring earnings management through discretionary accruals (DA) using the Modified Jones Model, the analysis reveals a consistent pattern of income-decreasing earnings management across most sectors. The negative average DA values suggest that firms deliberately reduced reported earnings—especially during periods of economic uncertainty such as the COVID-19 pandemic—to manage expectations, minimize tax liabilities, or navigate regulatory and political pressures.

1. Summary of Findings

- ❖ **Overall Earnings Management Behavior:** The study found that average DA values across all five years were consistently negative (ranging from -0.00294 to -0.0034), indicating widespread income-decreasing earnings management practices among FBM KLCI firms. This trend aligns with prior studies (e.g., Ayedh et al., 2019; Kliestik et al., 2021; Ji Sang Hyun

et al., 2019), suggesting a cautious financial reporting approach in times of economic stress.

- ❖ **Sector-Specific Trends:** The analysis shows that earnings management practices vary across sectors. The technology sector exhibited the highest average DA values, suggesting more aggressive or flexible reporting strategies, while the construction sector consistently reported the lowest, indicating a conservative and transparent approach to financial reporting. Other sectors, such as consumer products and services, and consumer discretionary, showed fluctuating but active engagement in earnings management, especially during crisis years.
- ❖ **Economic Context and Motivation:** The prevalence of income-decreasing DA practices during 2019–2021 may be linked to the onset of the COVID-19 crisis and related economic stimuli. Firms likely aimed to smooth earnings, build financial buffers, or avoid regulatory and stakeholder scrutiny. Additionally, some may have opted to defer earnings recognition to future periods with stronger economic performance.

2. Recommendations:

- ❖ **Enhanced Monitoring of Earnings Reporting:** Regulators should strengthen oversight of financial reporting practices, especially in sectors showing high DA volatility. Monitoring should focus on periods of economic distress when the risk of manipulative reporting increases.
- ❖ **Sector-Specific Governance Measures:** Industry regulators may consider tailoring corporate governance frameworks to specific sector characteristics. For example, sectors like technology and media may benefit from enhanced auditor scrutiny and greater transparency in revenue recognition policies.
- ❖ **Promotion of Earnings Quality:** Bursa Malaysia and institutional investors should incentivize firms to adopt practices that enhance earnings quality, such as voluntary disclosures, earnings persistence indicators, and stronger internal controls over financial reporting.

3. Limitations

While the study provides robust insights into sectoral patterns of earnings management, it is limited to firms in the FBM KLCI over a five-year period. The findings may not reflect practices in smaller firms or those listed on other indices in Malaysia. Additionally, this study focuses only on accrual-based earnings management and does not capture real activities manipulation, which could provide a fuller picture of earnings strategies.

4. Future Research

Future studies could investigate the interplay between accrual and real-based earnings management strategies and their impact on firm valuation. Research might also explore how corporate governance mechanisms, audit quality, or ownership structure affect earnings management across different economic cycles. Expanding the sample to include Shariah-compliant firms or those in other ASEAN markets could yield comparative insights. Furthermore, longitudinal studies could help track whether earnings management practices evolve post-pandemic and in response to emerging regulatory reforms.

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