

# Profitability, Stock Price Synchronicity, and Fraud: Implications for Earnings Management

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## ABSTRACT

The capital market is one of the main indicators of economic health, which is very sensitive to changes in global and domestic conditions. The aim is to analyze this moderating effect and provide insights into the risks associated with information transparency. Using a quantitative approach and secondary data from 35 technology firms listed on the Indonesia Stock Exchange (IDX) and Yahoo Finance, the data were analyzed through multiple linear regression and moderated regression analysis (MRA). Earning Management (EM) was measured using the Modified Jones Model, Stock Price Synchronicity (SPS) through the Morck et al. approach, Financial Statement Fraud (FSF) via the Beneish M-Score, and profitability using Return on Assets (ROA). The statistical results indicate that neither Stock Price Synchronicity nor Financial Statement Fraud had a significant effect on Earning Management. Moreover, profitability did not significantly moderate the relationship between Stock Price Synchronicity and Earning Management, nor between Financial Statement Fraud and Earning Management. The main findings suggest that, within the context of the sampled Indonesian technology firms, there is no empirical evidence supporting the influence of Stock Price Synchronicity and Financial Statement Fraud on Earning Management nor the moderating role of profitability, indicating the possible presence of other, more influential factors.

**Keywords:** Earnings Management, Stock Price Synchronicity, Financial Statement Fraud, Profitability, Earnings Manipulation, Moderated Regression Analysis.

## ABSTRAK

Pasar modal merupakan salah satu indikator utama kesehatan ekonomi yang sangat sensitif terhadap perubahan kondisi global maupun domestik. Tujuannya adalah untuk menganalisis efek moderasi ini dan memberikan wawasan tentang risiko yang terkait dengan transparansi informasi. Dengan menggunakan pendekatan kuantitatif dan data sekunder dari 35 perusahaan teknologi yang terdaftar di BEI dan Yahoo Finance, data dianalisis melalui regresi linier berganda dan Analisis Regresi Moderasi (MRA). Manajemen Laba (EM) diukur menggunakan Modified Jones Model, Sinkronisasi Harga Saham (SPS) melalui pendekatan Morck et al., Kecurangan Laporan Keuangan (FSF) melalui Beneish M-Score, dan profitabilitas menggunakan Retur non Assets (ROA). Hasil statistik menunjukkan bahwa baik Sinkronisasi Harga Saham maupun Kecurangan Laporan Keuangan tidak memiliki pengaruh yang signifikan terhadap Manajemen Laba. Selain itu, profitabilitas tidak secara signifikan memoderasi hubungan antara Sinkronisasi Harga Saham dan Manajemen Laba, maupun antara Kecurangan Laporan Keuangan dan Manajemen Laba. Temuan utama menunjukkan bahwa, dalam konteks perusahaan teknologi Indonesia yang dijadikan sampel, tidak ada bukti empiris yang mendukung pengaruh Sinkronisasi Harga Saham

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dan Kecurangan Laporan Keuangan terhadap Manajemen Laba, maupun peran moderasi profitabilitas, yang mengindikasikan kemungkinan adanya faktor lain yang lebih berpengaruh.

**Kata kunci:** Manajemen Laba, Sinkronisitas Harga Saham, Kecurangan Laporan Keuangan, Profitabilitas, Manipulasi Laba, Analisis Regresi Moderasi.

## INTRODUCTION

The rapid development of companies in the finance and investment sectors within this fast-paced technological era has spurred significant interest in research on Earnings Management, particularly in technology firms (Strycharz et al., 2018; Wen et al., 2021). Earnings Management refers to the efforts by company management to manipulate financial information to influence shareholders' or investors' perceptions of the company's performance, making it a widely debated topic in both academic literature and business practice. Profit figures often become the primary target for such manipulation, as companies seek to exploit opportunities or loopholes to present more favorable financial results (Pevzner et al., 2015). Earnings Management typically involves managerial actions that influence reported earnings in financial statements, either through accrual-based or real activities, to achieve specific objectives. Therefore, information regarding profits significantly influences investors' investment choices, and managers might be motivated to artificially enhance the company's performance image through Earnings Management (Chan & Chan, 2014; Narsa et al., 2023).

Amidst the rapid technological advancement and dynamic corporate developments, stock prices are constantly shifting due to the continuous inflow of new information from various sources. Stock Price Synchronicity indicates how much of a firm's stock return can be attributed to movements in overall market and industry returns (Morck et al., 2021; Putri & Butar, 2024). When synchronicity is high, it implies that market-wide factors play a larger role in shaping stock prices than firm-specific elements. While high synchronicity may create opportunities for short-term investors, it can also increase risks for long-term investors, as it reflects a heavy reliance on external market data and possibly a lack of transparency in firm-specific information (Xing & Anderson, 2011; Bissessur & Hodgson, 2012). Conversely, a diminished degree of stock price synchronicity signifies that idiosyncratic firm-level information exerts a more substantial influence on stock price determination, consequently facilitating more informed decision-making by investors (Dasgupta et al., 2010). Stock Price Synchronicity is typically quantified using the R-squared statistic obtained from regressions of individual stock returns (Bai et al., 2019; Fitri & Agustin, 2020).

Conversely, fraudulent financial reporting poses a significant problem, eroding investor trust and jeopardizing the stability of financial markets. It can cause far-reaching negative consequences, not only for individual investors but also for the global economy at large. Foroghi and Ghasemzad, (2016) states that financial statement fraud occurs when material facts are intentionally or unintentionally misrepresented or omitted, or when misleading accounting data is used, such that it would affect how a reader judges a situation or makes decisions, given all available information. Such fraud may involve inflating profits, concealing liabilities, or manipulating assets, practices that can distort market efficiency and damage a company's credibility (Shekari & Jamshidinavid, 2017; Feryan & Amin, 2024).

From a theoretical standpoint, agency theory explains such opportunistic behaviors, while the Fraud Triangle suggests that financial pressures such as low profitability can be a major motivator behind fraudulent actions (Kordlar et al., 2016; Rao & Zhou, 2019). The ability of a company to generate financial returns, or its profitability, assumes a pivotal role within this specific framework. Theoretically, companies with high profitability enjoy greater financial flexibility and have less incentive to manipulate earnings. In contrast, low profitability can exert pressure that increases the likelihood of Earnings Management (Callao et al., 2014; Ramírez-orellana et al., 2017). Therefore,

profitability is hypothesized to moderate the relationship between stock price synchronicity, financial statement fraud, and earnings management either by strengthening or weakening this relationship. Companies with high profitability tend to have less need to manipulate financial reports, whereas those with low profitability may resort to fraudulent actions to maintain a positive image in the eyes of investors.

Based on the introduction, the research gap lies in the limited studies examining the moderating role of profitability on the relationship between stock price synchronicity, financial statement fraud, and earnings management, particularly within Indonesian technology firms. While prior research has explored these variables individually, there is a lack of integrated analysis addressing how profitability influences the dynamics between market-wide information dependence, fraudulent reporting, and managerial earnings manipulation. This study aims to fill this gap by investigating the direct effects of stock price synchronicity and financial statement fraud on earnings management, and how profitability moderates these relationships during the period 2020–2024. Using quantitative methods and moderated regression analysis on data from Indonesian technology companies, the research seeks to provide valuable insights for investors, regulators, and scholars on information transparency and risks in capital markets.

The goal is to provide insights for investors, regulators, and academics regarding the risks of information manipulation and transparency in capital markets. This research is structured around a quantitative framework, utilizing secondary data sourced from company financial disclosures and stock market activity. These data will be analyzed through multiple regression and moderated regression analysis. Through the exploration of these dynamics, the study endeavors to furnish investors, regulators, and the academic community with pertinent insights for discerning risks associated with the transparency of information within capital market environments.

## **LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT**

### **Foundational Theories**

This study is grounded in four key theoretical perspectives: Agency Theory, the Fraud Triangle, Signaling Theory, and the concept of Earnings Management, which collectively explain the motivations and mechanisms behind financial statement manipulation. Agency Theory, as proposed by Jensen & Meckling (1976), describes the relationship between principals (e.g., shareholders) and agents (e.g., management), where differing objectives may lead agents to act in self-interest. Such agency conflicts often result in earnings management, a form of managerial opportunism intended to adjust reported financial outcomes to align with internal interests (El Diri, 2018). The Fraud Triangle, introduced by Zhang et al. (2018) and elaborated by Suswam and Ugwudioha (2025), identifies pressure, opportunity, and rationalization as key drivers of fraud. Pressures such as unrealistic financial targets or economic difficulties, combined with weak internal controls, create fertile ground for financial statement fraud. Cheong and Zurbruegg (2016) emphasize that more than half of fraud cases arise from internal control failures. These risks can be mitigated through strong governance, internal audits, and accountability measures (Bansal 2024; Kurniawati & Sarwono, 2024). Signaling Theory, as described by Spence (1973), asserts that firms communicate private information to reduce information asymmetry via financial reports or corporate actions. High profitability serves as a positive signal to investors, whereas poor performance may lead to concealment through earnings management (Przepiorka & Berger, 2017). In this context, stock price synchronicity, measured using the R-squared value from market regressions, serves as a proxy for how much firm-specific information is reflected in stock prices (Pratiwi et al., 2021). High synchronicity is a negative signal indicating poor information transparency (Cheng et al., 2013), while low synchronicity suggests effective disclosure. Finally, earnings management involves manipulating financial outcomes through accrual adjustments or real activities to meet performance expectations (Scott & O'Brien, 2020; Subadriyah et al., 2020). These theoretical perspectives collectively support the study's investigation into

how profitability moderates the relationships among stock price synchronicity, financial statement fraud, and earnings management.

### **Stock Price Synchronicity and Earnings Management**

Based on signaling theory, Dang et al. (2023) define stock price synchronicity as the degree to which a stock's price reflects general market trends rather than company-unique information. These price changes, reacting to available information, ultimately affect stock returns. Zhang et al. (2018) highlight the notion that within an efficient market, security prices fully impound all public data, a condition conducive to judicious decision-making by investors. Thus, stock price synchronicity quantifies the linkage between an individual stock's price fluctuations and overall market volatility. However, in practice, market information is not always reliable, and not all investors act rationally when making investment decisions (Fama, 1970; Malkiel, 2003).

A study in the U.S. market from 1992 to 2020 by Twongirwe and Bakundana (2025), which employed panel regression and instrumental variable analysis, revealed two key points: firstly, that CEOs with more experience tend to engage less in earnings management (specifically through discretionary accruals), and secondly, that there's a positive correlation between such accruals and stock price synchronicity. This contributes to the broader observation that the relationship between earnings management and stock price synchronicity can differ across various markets (Brown, 2014; Bui, 2024). This implies that higher synchronicity aligns with greater earnings management. In contrast, Dang et al. (2023), studying 356 non-financial companies in Vietnam (HOSE, 2012–2021) using panel regression methods (OLS, FE, RE, GMM), found that accrual-based earnings management significantly decreases stock price synchronicity, suggesting that such manipulation adversely affects how closely stock prices track the market.

While the primary focus of their research was on how earnings management impacts stock price synchronicity, its results also indirectly point to a strong connection between the quality of accounting information and this synchronicity.

H1: Stock price synchronicity has a significant effect on earnings management.

### **Financial Statement Fraud and Earnings Management**

Financial statement fraud involves intentionally manipulating financial reports to mislead information users such as investors, lenders, and regulatory bodies. According to the ACFE (2024), it stands alongside asset misappropriation and corruption as one of the three primary fraud categories. Although it occurs less frequently than the other two types, financial statement fraud causes the most significant financial losses to companies and stakeholders (Kayoi & Fuad, 2019). Rosmianingrum et al. (2023) define fraud as a form of deception that involves several essential elements: a representation concerning a material matter, which is in fact false, and is made intentionally or recklessly, such that it is believed by the victim, who subsequently suffers a loss.

Research by Suryaningsih and Simon (2019) investigated companies on the Indonesia Stock Exchange (IDX) between 2011 and 2015, focusing on firms flagged by the Financial Services Authority (*Otoritas Jasa Keuangan/OJK*) for financial fraud. Using logistic regression, they found that real earnings management, specifically indicated by abnormal cash flow from operations, significantly impacts fraudulent financial reporting (identified by profit reversal). However, discretionary accrual earnings management, measured by discretionary expenses, did not show a significant effect. This suggests that manipulating actual operating cash flows is more indicative of financial statement fraud. Similarly, Narsa et al. (2023) analyzed 284 manufacturing firms listed on the IDX from 2017 to 2019, employing a modified M-Score model and logistic regression; however, the specific findings of this latter study are not detailed in this excerpt.

H2: Financial statement fraud has a significant effect on earnings management.

### The Moderating Effect of Profitability

The capacity of an enterprise to derive earnings from its operational endeavors is termed profitability (Butar, 2019). Within the disciplines of accounting and finance, profitability ratios, notably Return on Assets (ROA) and Return on Equity (ROE), are standard tools for appraising managerial efficiency and aggregate corporate performance. Profitability is also closely linked to earnings management practices, as firms with low profitability are more likely to manipulate financial results to appear financially healthy (Mitra, 2016; Habib et al., 2022).

Furthermore, profitability can assume the role of a moderating variable, thereby influencing the association between exogenous factors such as stock price synchronicity and financial statement fraud and managerial practices, including earnings management. According to signaling theory, firms with high profitability send positive signals to the market to reduce information asymmetry (Spence, 1973). In this context, high profitability may weaken the effect of stock price synchronicity on earnings management because profitable firms are less incentivized to manipulate earnings, as their performance is already favorably perceived. Conversely, in low-profit firms, high stock price synchronicity is often viewed as a negative signal due to low firm-specific information, which may increase the tendency for earnings management to mask weak fundamentals (Cheng et al., 2013; Gassen et al, 2020; Pratiwi et al., 2021).

Similarly, profitability moderates the relationship between financial statement fraud and earnings management. Firms with strong profitability are less reliant on fraudulent reporting, thereby reducing the likelihood of engaging in earnings management, even when fraudulent tendencies exist. In contrast, low-profit firms may exploit financial statement fraud more aggressively to manipulate earnings and maintain investor confidence (Przepiorka & Berger, 2017; Scott & O'Brien, 2020). Thus, profitability functions as a contextual factor that can either strengthen or weaken these associations depending on internal performance signals and market expectations (Subadriyah et al., 2020; Zhang et al., 2022).

H3: Profitability moderates the effect of stock price synchronicity on earnings management.

H4: Profitability moderates the effect of financial statement fraud on earnings management.

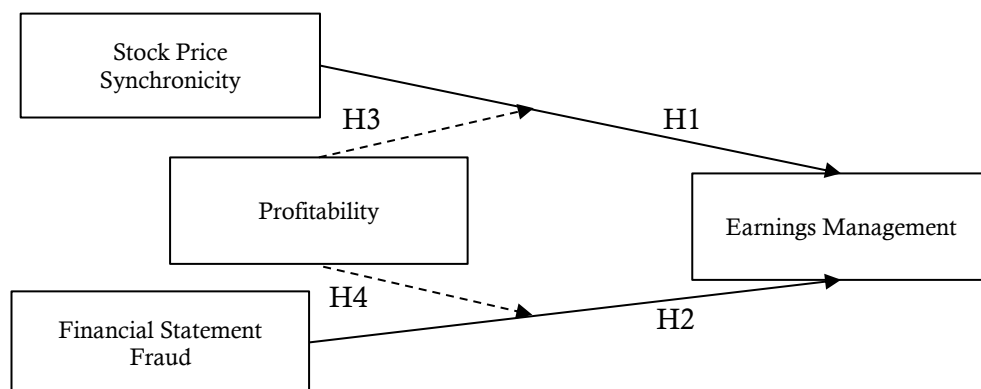


Figure 1. Conceptual Framework

Figure 1 illustrates a conceptual model of the relationship between Stock Price Synchronicity, Financial Statement Fraud, and Earnings Management, with Profitability as a moderating variable. In this model, Stock Price Synchronicity and Financial Statement Fraud serve as independent variables, each influencing Earnings Management as the dependent variable. Profitability is placed in the center and is depicted by two dotted lines leading to two main arrows, indicating its role as a moderating variable in both relationships. This means that Profitability is hypothesized to strengthen or weaken the

influence of Stock Price Synchronicity and Financial Statement Fraud on Earnings Management. This model is used to explore how internal company factors (in this case, profitability) can influence the relationship between capital market dynamics and financial statement manipulation practices in the context of earnings management.

## RESEARCH METHODS

This study adopts a quantitative approach to examine the moderating role of profitability in the relationship between Stock Price Synchronicity (SPS), Financial Statement Fraud (FSF), and Earnings Management (EM) among technology sector companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. The sample was selected through purposive sampling, targeting firms in the technology sector with complete financial and market data available on IDX and Yahoo Finance. From an initial population of 47 companies, 34 were excluded due to incomplete data, resulting in a final sample of 13 firms. With a five-year observation period, the total dataset comprised 65 firm-year observations. This research examines whether profitability moderates the relationship between stock price synchronicity and financial statement fraud on earnings management among Indonesian technology companies during the 2020-2024 period, with limited prior research. The sample was selected using purposive sampling. Secondary data were utilized, obtained from the Indonesia Stock Exchange (IDX) platform and Yahoo Finance. Financial report data were sourced from the companies' annual financial statements, while stock data were derived from weekly historical data spanning one year.

The research sample was determined through a series of selection criteria. Initially, 47 technology sector companies listed on the Indonesia Stock Exchange and Yahoo Finance were identified. However, 34 of these companies were excluded from the sample due to incomplete data related to the research variables. As a result, the final research sample consisted of 13 companies. Considering a five-year observation period, the total number of samples used in the study amounted to 65 (13 companies × 5 years)

In this study, earnings management serves as the dependent variable. Earnings management refers to managerial actions taken to manipulate reported earnings. These actions may be carried out using various methods, either to increase or decrease reported profits. In the context of this research, the main focus is on earnings management in financial reporting. Managers often engage in this practice to avoid reporting losses or to meet earnings targets. Therefore, this study uses financial statements from 2020 to 2024 to analyze earnings management practices.

Discretionary Accruals (DAC), are quantified using the Modified Jones Model (1995). The specific equations for calculating earnings management based on this model are detailed below:

- Calculating the value of  $TAC_{i,t}$  (Total Accruals):  $TAC_{i,t} = NI_{i,t} + CFO_{i,t}$
- Calculating the estimated accrual value with the OLS (Ordinary Least Squares) regression equation:

$$TAC_{i,t}/TA_{i,t-1} = \alpha_0 \left[ \frac{1}{TA_{i,t-1}} \right] + \alpha_1 \left[ \frac{\Delta REV_{i,t}}{TA_{i,t-1}} \right] + \alpha_2 \left[ \frac{PPE_{i,t}}{TA_{i,t-1}} \right] + \epsilon$$

- Calculating the value of  $NDA_{i,t}$  (Non-Discretionary Accruals):

$$NDA_{i,t} = \alpha_0 \left[ \frac{1}{TA_{i,t-1}} \right] + \alpha_1 \left[ \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{TA_{i,t-1}} \right] + \alpha_2 \left[ \frac{PPE_{i,t}}{TA_{i,t-1}} \right] + \epsilon$$

- Calculating the value of  $DAC_{i,t}$  (Discretionary Accruals):

$$DAC_{i,t} = \left[ \frac{TAC_{i,t}}{TA_{i,t}} \right] - NDA_{i,t}$$

This study uses multiple linear regression with Ordinary Least Squares (OLS) methods, followed by Moderated Regression Analysis (MRA). The first stage examines the effect of Stock Price Synchronicity (SPS) and Financial Reporting Fraud (FSF) on

Earnings Management (EM). The second stage examines whether Profitability (PROF) moderates this relationship through an interaction term. Data analysis was performed using SPSS version 25. The following formula is used:

$$EM = \beta_0 + \beta_1SPS + \beta_2FSF + \epsilon$$

$$EM = \beta_0 + \beta_1SPS + \beta_2FSF + \beta_3(SPS \times PROF) + \beta_4(FSF \times PROF) + \epsilon$$

## RESULTS

Table 1 presents the descriptive statistics for the four variables analyzed across 65 observations. Stock Price Synchronicity (SPS) has a mean of -2.2441 with a range of 6.3469 and a standard deviation of 1.1867. Financial Statement Fraud (FSF) shows a wide range of 64.1832, a mean of -1.6169, and a standard deviation of 7.3873. Earnings Management (EM) has a very large range, with a mean of  $-3.31 \times 10^{10}$  and a standard deviation of  $3.63 \times 10^{11}$ . Profitability (PROF), measured by ROA, has a mean of -3.5523, a wide range of 287.7057, and a standard deviation of 35.5749, indicating high variability in firm performance.

Table 1. Descriptive Statistics

Information	Variable			
	SPS	FSF	EM	PROF
N	65	65	65	65
Range	6.3469	64.1832	2.5446E+12	287.7057
Minimum	287.7057	-10.4947	-1.3878E+12	-234.0472
Maximum	0.5408	53.6885	1.1567E+12	53.6586
Mean	-2.2441	-1.6169	-3.3064E+10	-3.5523
Std. Dev	1.1867	7.3873	3.6269E+11	35.5749
Variance	1.408	54.572	1.315E+23	1265.577
Skewness	-0.360	6.737	-0.721	-4.969
Skewness Std. Error	0.297	0.297	0.297	0.297
Kurtosis	0.726	50.913	5.153	29.633
Kurtosis Std. Error	0.586	0.586	0.586	0.586

Based on Table 1 Descriptive Statistics, the Stock Price Synchronicity (SPS) variable, consisting of 65 data points, had a range of 6.3469. The minimum SPS value was  $-5.8061$ , while the maximum was 0.5408. The mean SPS was  $-2.2441$ , with a standard deviation of 1.1867 and a variance of 1.408. The data distribution for this variable was slightly left-skewed, as indicated by a skewness value of  $-0.360$ . The kurtosis value of 0.726 suggested that the distribution was approximately normal, although slightly flatter than a standard normal distribution.

The Financial Statement Fraud (FSF) variable also comprised 65 observations, with a large range of 64.1832. The minimum FSF value was  $-10.4947$ , and the maximum was 53.6885. The mean was  $-1.6169$ , with a standard deviation of 7.3873 and a variance of 54.572. The distribution of this variable was highly right-skewed, as indicated by a skewness value of 6.737, and demonstrated strong leptokurtic characteristics, with a kurtosis value of 50.913, suggesting the presence of numerous outliers.

The Earnings Management (EM) variable consisted of 65 data points, with a range of  $2.5446 \times 10^{12}$ . The minimum value was  $-1.3878 \times 10^{12}$ , and the maximum was  $1.1567 \times 10^{12}$ . The mean EM was  $-3.3064 \times 10^{10}$ , with a standard deviation of  $3.6269 \times 10^{11}$  and a variance of  $1.315 \times 10^{23}$ . The distribution of EM was slightly left-skewed (skewness =  $-0.721$ ), and the kurtosis value of 5.153 indicated a more peaked distribution compared to the normal distribution.

The Profitability (PROF) variable had 65 observations, with a range of 287.7057. The minimum value was  $-234.0472$ , and the maximum was 53.6586. The mean was  $-3.5523$ , with a standard deviation of 35.5749 and a variance of 1,265.577. The distribution for this

variable was strongly left-skewed, as shown by a skewness value of  $-4.969$ , and highly leptokurtic, with a kurtosis value of  $29.633$ , indicating the presence of substantial outliers.

**Table 2.** Tests of Normality

Variable	Statistic	df	Sig.
SPS	0.982	35	0.833
FSF	0.972	35	0.496
EM	0.946	35	0.084
PROF	0.971	35	0.484

Normality testing was conducted using the Shapiro–Wilk test at a significance level of 0.05. Based on Table 2, the results, all variables SPS ( $p = 0.833$ ), FSF ( $p = 0.496$ ), EM ( $p = 0.084$ ), and PROF ( $p = 0.484$ ) showed significance values greater than 0.05. This indicates that the data were normally distributed after the removal of outliers through boxplot analysis. Following this procedure, the sample was reduced from 65 to 35 observations that satisfied the normality assumption.

A variable is adjudged to be influential if its associated significance value is less than the 0.05 criterion. Conversely, if the significance value surpasses 0.05, the variable is construed as lacking influence.

**Table 3.** Model Summary

Model	Value
R	0.179
R Square	0.032
Adj. R Square	-0.028
Std. Error of the Estimate	9.40855E+10
Durbin-Watson	1.922

Table 3, presenting the Model Summary, details the assessment of how well the multiple linear regression model using Stock Price Synchronicity (SPS) and Financial Statement Fraud (FSF) as predictors explains Earnings Management (EM). The model summary indicated an R value of .179. The  $R^2$  value was .032, suggesting that the model accounted for approximately 3.2% of the variance in earnings management. The adjusted  $R^2$  was -.028, indicating poor predictive power after adjusting for the number of predictors and the sample size. The Durbin–Watson statistic was 1.922, which is close to the ideal value of 2, suggesting that autocorrelation of residuals was not a significant concern. The standard error of the estimate was  $9.40855 \times 10^{10}$ .

**Table 4.** ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.421E+21	2	4.710E+21	0.532	0.592
Residual	2.833E+23	32	8.852E+21		
Total	2.927E+23	34			

The analysis of variance (ANOVA), detailed in Table 4, showed no statistical significance for the overall model ( $F(2, 32) = 0.532$ ,  $p = .592$ ). This outcome implies that the independent variables, Stock Price Synchronicity (SPS) and Financial Statement Fraud (FSF), when assessed jointly, were not effective in significantly predicting earnings management.

**Table 5.** Multiple Linear Regression

Variable	Unstandardized B	t	Sig.	Tolerance	VIF
Constant	-1.649E+10	-0.266	0.792		
SPS	1.071E+10	0.991	0.329	0.999	1.001
FSF	-7276418691	-0.310	0.759	0.999	1.001
Constant	-1.329E+10		0.838	—	—
SPS	1.886E+10		0.223	0.530	1.888
FSF	-1.266E+10		0.615	0.930	1.076
SPS_P	-1188991958		0.438	0.180	5.550

Variable	Unstandardized B	t	Sig	Tolerance	VIF
FSF_P	964102786.7		0.563	0.219	4.571
Constant	-2.487E+10		0.141	—	—
SPS_C	1.440E+10		0.240	0.846	1.182
FSF_C	-8.496E+09		0.733	0.947	1.056
SPS_PROF	-1.238E+09		0.446	0.835	1.197
FSF_PROF	8.521E+08		0.786	0.922	1.084

Based on the Multiple Linear Regression test results (referring to Table 5), Stock Price Synchronicity (SPS) had a positive regression coefficient of  $1.071E+10$  with a significance value of 0.329. This indicates that SPS did not have a statistically significant effect on Earnings Management (EM), as the significance value was  $> 0.05$ . Financial Statement Fraud (FSF) had a negative regression coefficient of  $-7.276E+09$  with a significance value of 0.759, indicating that the indication of fraud in financial statements did not significantly affect Earnings Management (EM) practices.

The resulting Ordinary Least Squares (OLS) regression equation was:

$$EM = -1.649 \times 10^{10} + (1.071 \times 10^{10} \times SPS) - (7.276 \times 10^{09} \times FSF)$$

Based on the MRA test results without interaction terms (referring to Table 6 of the original manuscript), no independent variables were found to have a significant effect on Earnings Management, as indicated by significance values exceeding 0.05. The VIF values for SPS\_P (5.550) and FSF\_P (4.571) indicated the presence of multicollinearity, although still within generally accepted tolerance limits.

The MRA equation without interaction terms was:

$$EM = -1.329 \times 10^{10} + (1.886 \times 10^{10} \times SPS) - (1.266 \times 10^{10} \times FSF) - (1.189 \times 10^{09} \times SPS\_P) + (9.641 \times 10^{08} \times FSF\_P)$$

After centering the variables, all VIF values decreased and were below the reasonable limit ( $VIF < 10$ ), as shown in the MRA test results with interaction terms (referring to Table 6 of the original manuscript), indicating that the multicollinearity problem was successfully controlled. However, even with controlled multicollinearity, the regression results showed that no variables statistically significantly affected Earnings Management ( $p > 0.05$  for all variables).

The MRA equation with centered interaction terms was:

$$EM = -2.487 \times 10^{10} + (1.440 \times 10^{10} \times SPS\_C) - (8.496 \times 10^{09} \times FSF\_C) - (1.238 \times 10^{09} \times SPS\_PROF) + (8.521 \times 10^{08} \times FSF\_PROF)$$

Stock Price Synchronicity Centered (SPS\_C) had a positive coefficient of  $1.440 \times 10^{10}$  and a significance of 0.240. Financial Statement Fraud Centered (FSF\_C) showed a negative coefficient of  $-8.496 \times 10^9$  with a significance value of 0.733. The interaction variables SPS\_PROF (interaction of Stock Price Synchronicity with Profitability) and FSF\_PROF (interaction of Financial Statement Fraud with Profitability) were also not significant, with p-values of 0.446 and 0.786, respectively. This indicates that Profitability did not act as a moderating variable in the relationship between SPS and FSF towards Earnings Management. Based on VIF and Tolerance values, there were no indications of high multicollinearity; all VIF values were below 10 (highest at 1.197) and all Tolerance values exceeded 0.1.

## DISCUSSION

According to this study's findings, Stock Price Synchronicity (SPS) was not found to significantly affect Earnings Management (EM) ( $p = 0.329$ ). Although the direction of the relationship suggests that SPS tends to positively influence EM, this effect was not

statistically significant. This means that in the context of the technology sector companies that are sampled, the uniformity of stock price movements with the market does not significantly affect the tendency of management to manage profits. This outcome is inconsistent with previous research by Jin and Myers (2006), Hutton et al. (2009), and Rajgopal and Venkatachalam (2011), which posited that high SPS could reflect low transparency and increase the risk of earnings management. The discrepancy in these findings may be attributed to the specific characteristics of the sampled companies (i.e., those in the technology sector), the prevailing economic conditions during the study period, or the limited sample size after the removal of outliers.

The study also found no significant effect of Financial Statement Fraud (FSF), assessed by the M-Score, on Earnings Management (EM) ( $p = 0.759$ ). This contrasts with previous findings by Hasnan et al. (2013), Suryandari et al. (2019), and Jaya et al. (2021), where FSF was linked to earnings management. The current study's divergent result might stem from limitations in the FSF proxy, a strong regulatory environment, or effective internal controls in the sample firms. This difference in results can be explained by several rational factors. First, the limitations of the FSF proxies the use of M-Score may be less sensitive in capturing variations in fraud behavior in the technology sector, especially if the accrual characteristics and revenue patterns differ from those of other sectors. Second, strong external regulations and supervision, for example, through the regulations of the Financial Services Authority (OJK) and strict reporting obligations in the Indonesian capital market, can reduce the chances of significant fraud.

The study extends its analysis to consider if Profitability (PROF) acts as a moderator, specifically looking at its impact on how SPS relates to EM and, separately, how FSF relates to EM. Results from the Moderated Regression Analysis (MRA), after addressing multicollinearity through variable centering, indicated that the interaction terms (SPS\_PROF and FSF\_PROF) were not statistically significant ( $p = 0.446$  and  $p = 0.786$ , respectively). These findings suggest that profitability does not significantly moderate the impact of either stock price synchronicity or financial statement fraud on earnings management within the context of the technology sector firms sampled. While theoretical frameworks propose that profitability may influence a firm's tendency to engage in earnings management under specific market information conditions or fraud indicators the current data do not empirically support this moderating effect.

The initial MRA model (prior to centering) showed VIF values for the interaction variables involving profitability, SPS\_P at 5.550 and FSF\_P at 4.571, suggesting potential multicollinearity. However, this issue was resolved by centering the variables, which reduced all VIF values to well below the commonly accepted threshold of 10, affirming the stability of the final MRA model estimates. Despite this methodological improvement, the substantive findings regarding the lack of significant relationships remained unchanged. The empirical evidence presented in this study does not support the hypothesized relationships among stock price synchronicity, financial statement fraud, and earnings management, nor does it support a moderating role for profitability in these relationships within the sampled technology firms.

## **CONCLUSION**

This study concludes that Stock Price Synchronicity and Financial Statement Fraud do not have significant effects on Earnings Management among technology companies listed on the Indonesia Stock Exchange (IDX). Although high Stock Price Synchronicity is theoretically linked to lower information transparency and greater Earnings Management potential, the empirical evidence does not support this relationship in the sampled firms. Moreover, Profitability did not show a significant direct effect on EM nor did it moderate the relationships between SPS or FSF and EM. Even after addressing multicollinearity through variable centering, the significance of these relationships remained unchanged.

Practically, the findings indicate that regulators, investors, and management should not rely solely on SPS, FSF, or profitability to assess earnings management risk in the

technology sector. Broader analyses incorporating alternative risk factors and control mechanisms are needed. Theoretically, the results challenge assumptions from agency theory, signaling theory, and the fraud triangle, suggesting these frameworks may not fully explain earnings behavior in Indonesia's technology sector. The study's limitations include its focus on a single sector, potential measurement constraints in SPS and FSF, and a moderate sample size ( $n = 65$ ) that may limit statistical power. Future research should examine other sectors, use higher-frequency data, apply advanced fraud detection methods such as machine learning, and adopt longitudinal designs to test the consistency of profitability's moderating role over time and across economic conditions.

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