THE IMPACT OF OWNERSHIP STRUCTURE AND COMPANY SIZE ON CORPORATE FINANCIAL FRAUD: AN EMPIRICAL STUDY OF MANUFACTURING COMPANIES

Sasongko Tri Utomo *, Wisnu Mawardi **

* *Corresponding author*, Department of Management, Faculty of Economics and Business, University of Diponegoro, Semarang, Indonesia; Faculty of Economics and Business, Muhammadiyah University of Surakarta, Surakarta, Indonesia
Contact details: Department of Management, Faculty of Economics and Business, University of Diponegoro, 50241 Semarang, Indonesia
** Department of Management, Faculty of Economics and Business, University of Diponegoro, Semarang, Indonesia

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Abstract

The concept of corporate deviant behavior occurs due to pressure on company profits and reputation. This pressure can trigger financial and non-financial fraud and increase the risk of corruption (Sukmadilaga et al., 2022; Vian, 2020; Zhang et al., 2023). This study investigates the effect of domestic and foreign ownership on financial fraud. In detecting financial fraud using the Beneish model, it will be stated that the company is considered a manipulator or non-manipulator. There were 315 observational data from 63 manufacturing companies listed on the Indonesia Stock Exchange (IDX). Along with a multiple linear regression testing model, data was analyzed using SPSS 23 software. This finding shows that foreign and domestic ownership positively affects financial fraud. It has a role in increasing companies to commit financial statement fraud following signaling theory with agency theory, where management and principles have their own goals in shaping interests in companies that cause moral hazard problems. Meanwhile, the size of the company negatively affects financial fraud. This has an impact on preventing companies from financial fraud. In Indonesia, opportunistic behavior focuses on manipulating performance by opportunistically forming groups within companies to make policies and decisions that benefit capital owners.

Keywords: Ownership Structure, Company Size, Corporate Financial Fraud, Manufacturing Companies

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1. INTRODUCTION

Financial fraud often occurs in the capital markets and can harm companies or others. The highest risk appears to investors because companies can hide information. Financial statement fraud damages accounting and capital market trust's credibility, integrity, and objectivity. These actions reduce financial confidence, capital market efficiency, and economic growth. Company performance that does not meet expectations can result in the manipulation of financial reports involving management and employees. Without realizing it, financial fraud reduces investor confidence and harms the company's reputation. The cause is a manipulation of financial statements, which can make the company illiquid and heavily indebted. This encourages companies to achieve their goals through illegal means. Investors must understand fraudulent manipulation and pay attention to management's actions against shareholders who control the company.

The concept that makes companies deviate occurs there is the pressure that arises. Profit pressure not only encourages company management to improve short-term financial performance but also encourages decisions based on the company's reputation (Zhang et al., 2023). Donald R. Cressey (1919–1987) introduced the pressure of deviation about the essentials of fraud. There are three elements, namely 1) pressure, 2) opportunity, and 3) rationalization (Stattler & Grabel, 2020). The concept explored in the fraud triangle is pressure on the company's shareholder representatives. The fraud triangle theory has been well-known for decades. This theory is a reference for most researchers and refers to the Statement of Auditing Standard (SAS) No. 99 issued by the American Institute of Certified Public Accountants (AICPA) in October 2002. Indonesia then adopted the rule in SAS 99 into Public Accountant Professional Standard (SPAP) Number 70 to assess fraud risk factors in the audit process by the Indonesian Accounting Association (IAI) and Babepam (Yusrianti et al., 2020). Focus on pressure fraud that occurs and pressure will create deviant behavior due to individuals' high stress. The higher the pressure on individuals, the more likely they are to commit financial and non-financial fraud (Sukmadilaga et al., 2022). Pressure contributes to corruption risk in several ways (Vian, 2020).

The company's ownership structure plays an essential role in the supervision and control of the company. Foreign investors have greater bargaining power than public and government officials, especially in developing countries (Liedong et al., 2023). However, institutional ownership can reduce conflicts between owners and management through better control and supervision (Choi et al., 2020). In a stricter perspective, domestic investors have easier access to company information and are more active in monitoring financial and operational performance. They also tend to hold shares for the long term, thereby encouraging long-term financial integrity. Meanwhile, foreign ownership challenges company supervision due to limited access to information and cultural and geographical differences (Tokas & Yadav, 2023). However, the presence of foreign investors can also encourage better corporate activity and supervision (Kostyuk et al., 2011; Tayem, 2022; Turshan & Karim, 2022). However, company management must maintain its reputation in the domestic market and implement ethical and transparent financial practices (Debnath et al., 2022; Lizarzaburu et al., 2023). The presence of foreign investors can also strengthen company supervision and establish international regulations, such as transparency in company activities.

Large firm size has a role in generating company profits. According to Siregar and Utama (2008), the company size is one factor that influences management in managing companies such as small-scale companies, which tends to avoid reporting losses on profits generated. From the firm size perspective, the larger the company, the more information and expertise the company's management must possess (Chen, Chen, et al., 2022). According to Setia Atmaja (2016), large companies have access to better capital markets to reduce dependence's impact on internally generated funding.

According to research by Fathmaningrum and Anggarani (2021), in 2016, there were three major fraud cases in Indonesia. The first case is corruption (77%), the second case is misappropriation of organizational assets (19%), and the third case is financial reporting fraud (4%). PricewaterhouseCoopers also discovered three major fraud cases in Malaysia in the same year. The first case is asset misappropriation (57%), the second case is corruption, bribery, and cybercrime (30%), and the third case is financial reporting and procurement fraud (17%) (PricewaterhouseCoopers [PwC], 2016). Fraudulent financial reporting in each country is influenced differently by the economic situation, individual character, and the company's internal control system (Otengkoramah Badoo et al., 2020). So, this research focuses on the factors that influence financial fraud, including the corporate governance structure and assets owned by the company. Apart from that, researchers have conducted studies of companies in Indonesia because Indonesia is a developing Southeast Asian country and has still adhered to a family business system for generations. According to the 2015 Legatum Institute survey, Indonesia has an unstable level of prosperity and economy compared to other Southeast Asian countries (Fathmaningrum & Anggarani, 2021). In addition, the impact of COVID-19 has forced companies to stop economic activities so that management may be encouraged to carry out fraudulent practices to achieve the expected targets (Vitolla et al., 2019). This increases the potential for corporate fraud in Indonesia.

This research deepens previous research regarding the largest shareholders with more power in earnings management practices (Dong et al., 2020). Additionally, controlling shareholders provide less informative earnings in response to the dilution of their ownership (Zhang, 2020). Institutional investors can improve company earnings management (Ma et al., 2023). Companies with ownership structures that do not function well can manipulate their share prices, especially overbought ones (Chen, Huang, et al., 2022). Then, low institutional ownership is negatively related to information asymmetry in the future (Chung et al., 2022). Foreign investment helps reduce the company's risk of fraud (Liang et al., 2022). In another study in Korea, after the reform of corporate control, cash flow rights decreased more in large companies (Choi et al., 2020). It was concluded that this research was carried out to answer the questions thoroughly, specifically regarding shareholders who could mitigate financial fraud.

In addition to the methodology of financial fraud, the literature found is not the same as this study. Zhou and Kapoor (2011) explored how to detect financial fraud using a model consisting of three variables, namely 1) conditions, 2) company structure, and 3) choices. According to Tang et al. (2022), financial fraud can be seen from the announcement of documentation issued by the capital market with dummy variables as proxies, namely 1) committing financial fraud and 2) not committing fraud. Lin et al. (2020) determined financial fraud on suspicion of 1) insider trading cases, 2) stock price manipulation, 3) accounting fraud, and 4) misleading statements, which will then be concluded with a dummy proxy between 1 and 0. Research by Nazir and Afza (2018) explains that profit management as a form of company intervention impacts the state of the improved financial statements and the method used by earning management using discretional earning management.

The Beneish M-Score model as a concept of financial fraud found in several studies compared to the Alman Z score or total accrual is considered more illustrative in detecting financial fraud in the Beinesh M-Score because it is regarded as an element that proxies more detail the factors exerting management pressure. According to Mavengere (2015), the Altman Z-score can be used to assess bankruptcy and financial manipulation, while the Beneish M-Score model is only used to determine the financial manipulation of companies. However, the Beneish M-Score model is more precise in measuring financial fraud than the Altman Z-score because the factors used are more detailed in its measurement. So, it can be explained that this research is still rarely carried out because the terms variables used in conducting relationships between variables are still unclear, and there is nothing in having an impact on financial fraud and the use of elements in the Beneish M-score has not been used according to the authors' knowledge.

The relevance of this study is significant for the securities of the IDX, the company, and investors. From the point of view of IDX equity, it is essential to pay attention to national-scale companies with complex interests between management and principals so that this research can make policy regulations that make the company transparent about its financial condition. Therefore, provide timely feedback on the Securities Regulatory Commission of the IDX disclosure requirements in controlling financial reporting control. From the company's point of view, there are conflicts of interest, complex funding sources, and operational chain levels that allow high pressure and risk of financial fraud. From the investor's point of view, it is possible to obtain facilities outside the budget provided by the company and pressure the company to meet the expected target so that management, if it does not meet the target, will carry out fraudulent activities in the company's financial situation. This needs to be considered so that investors can supervise all company operational activities and control the company's regulations that allow loopholes in financial fraud. After an explanation of previous research studies, in method and conceptual framework, we outline that investors who cannot control or supervise the company's operational activities nationally have high-risk management of committing financial fraud.

This research aims to make theoretical and practical contributions to the development of management studies, especially in companies' internal and external control. It is expected that this study can reveal the factors that influence financial reporting fraud using the theory of corporate governance structure and assets. The results are expected to be a reference for other research and can help investors in decision-making and encourage managers to be more careful in presenting financial statements to reduce the possibility of fraud.

The rest of the paper is structured as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 presents the research methodology. Section 4 provides the results and discussion. Section 5 concludes the paper.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In the context of foreign ownership, it is essential to understand its impact on foreign companies and financial institutions. Agency theory holds that considerable foreign shareholdings can provide incentives for effectively exercising supervision. An agent conflict arises between principle and management in determining goals. According to Douma et al. (2006), focus on problems that arise from the principle's desires with conflicting agents and find it challenging to find solutions. From the perspective of principles and agents, the consensus is that corporate governance mechanisms with weak finances will allow the causes of corporate financial fraud to occur (Yiu et al., 2019). The conflicts that arise in companies stem from information asymmetry between management and stakeholders (Sun et al., 2023). Information asymmetry gives company management access to financial statements that outsiders do not own, and profit management can occur. This perspective considers the extent to which information in finance can be evenly distributed among stakeholders. Assume knowledge of rudimentary information through several things, such as signaling, costs, or contracts. In financial fraud, the view of information asymmetry assumes that the authority in setting standards can create a better balance of regulation between principle and agent.

Some empirical studies on foreign ownership of financial fraud are still not widely discussed. Foreign ownership in corporate governance systems is a source of best practices in corporate management. Foreign ownership is a component that requires regulation to improve financial report quality (Hasan et al., 2022). Foreign ownership has a unique role in supervision, acting as a management monitor and becoming a shareholder representative (Rusmin et al., 2012). Companies controlled by foreign stakeholders are better than those held by local shareholders (Hooy et al., 2020). According to Adhikary et al. (2021), institutional stakeholders are essential in limiting real earning and accrual earning management in corporate governance. This shows that the larger the company's stakeholders, the minor earning management will be carried out, and it is considered that the implementation of the corporate governance system will be better. According to Liang et al. (2022), foreign investment reduces the risk of corporate fraud by reducing its likelihood, frequency, and severity. Foreign bloc investments and those from countries with strong investor protection have the most significant impact, especially on state-owned enterprises. Foreign investors serve as active monitors in emerging markets. According to Çelik et al. (2023), corporate and foreign ownership are significantly and negatively related to the timeliness of financial reporting. According to Tran et al. (2023), foreign ownership and corporate governance indices negatively affect profit management. According to Susianti and Oktorina (2023), foreign institutional and managerial ownership affects the quality of integrated reports.

H1: Foreign ownership impacts the company's financial fraud.

The government owns most domestic institutions, but some issues relate to government ownership (Cuervo-Cazurra & Li, 2021). Council candidates put forward by the government are usually bureaucrats with no expertise in corporate affairs. Government agencies need a solid incentive to be effective supervisors because their tenure and career are not affected by the performance of their companies. Businessman families with ties to the political elite can influence candidates to side with management, resulting in agency costs caused by its lack of incentive alignment. Governments are also less profit-oriented and less vigilant in supervisory roles because of support for social welfare goals (Pernell & Jung, 2024). Institutions or companies controlled by domestic shareholders are sometimes forced to buy shares of bad companies to provide bailouts during financial crises (Sikka & Stittle, 2019). The combined perspective of institutions, resources, and institutions negatively impacts company performance (Baah et al., 2021). Therefore, it can be assumed that domestic shareholders have an adverse influence on the performance of the company, which has a higher potential for financial fraud.

However, the domestic ownership of financial fraud is still not widely discussed. Chung et al. (2022) demonstrate that resolving conflicts of interest at the developing country level will optimize the effectiveness of domestic institutional involvement. For example, Choi et al. (2020) state that the 2001 Korean regulatory changes that treat domestic company ownership will create less frequency of financial fraud. According to Susianti and Oktorina (2023), domestic institutional ownership does not affect the quality of integrated reports. According to Adiyanto (2021), there is no influence between institutional ownership and final distress. According to Ding (2023), shared institutional ownership can hinder corporate research and development manipulation. The higher the level of linkage and the greater the shareholding, the more pronounced the synergistic effect. It is indicated that institutional ownership will build a high risk of fraud in every line of the company if there is no firm control over its business activities.

H2: Domestic institutional ownership impacts the company's financial fraud.

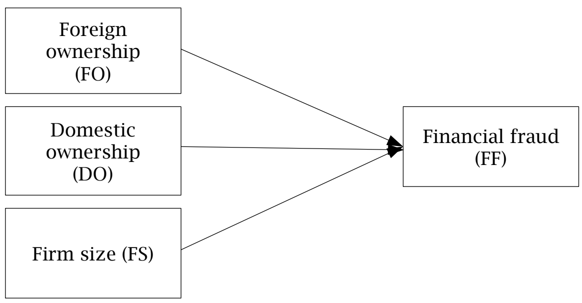
The company size has an essential impact on its reputation, service, and development. Large companies have financial resources, research facilities, superior technology, and more talented employees (Ramos Montesdeoca et al., 2019). They can resist management pressure due to a more extensive client portfolio. On the other hand, smaller companies provide a more personalized service because the client's portfolio is limited. The company size reflects the complexity of its activities, and it is essential to maintain control and supervision of the company (Abbas et al., 2021). Studies show that large companies are more independent and of higher quality but prone to supervisory failures (Gangi et al., 2020). Investors tend to demand large companies for detailed and complex disclosure of financial statements (de Souza et al., 2019). In addition, company size is used as a proxy for information asymmetry in pre-disclosure because managers of small companies can more successfully store their personal information than their counterparts in large companies (Campbell et al., 2021). Large companies are more accessible for investors or regulators to scrutinize than small companies, so small companies are expected to do less opportunistic profit management (Gao et al., 2020). This can increase the potential for financial fraud by managing large companies due to pressure from stakeholders.

However, firm size has yet to examine its relationship with fraud financial, but several previous studies related to this research, such as Islam et al. (2023), state that firm size affects the quality of financial reporting. Another study says that the larger the firm size owned by the company, the less audit delay will be generated (Ginting & Hidayat, 2019). This indicates that a reduced audit delay will make audits more accurate and less impacting fraud mitigation. The following result, the size of the company provides an impetus for managers to manipulate profits (Nalarreason et al., 2019). According to Ginting and Hidayat (2019), the impact generated by firm size negatively affects audit delay, making financial fraud less. According to Handoko et al. (2019), the company size has little effect on audit delays. According to Handoko et al. (2020), the company size does not affect the audit report lag. The audit report can describe the evaluation of reports produced by the company with indications of fraud to be used as a benchmark for financial fraud.

H3: Firm size impacts the company's financial fraud.

Based on the concept of literature built in this research, this study presents the following concept framework:

Figure 1. Conceptual framework



3. RESEARCH METHODOLOGY

This research uses a quantitative approach (Sekaran & Bougie, 2010). The sample focuses on manufacturing companies listed on the IDX from 2016 to 2020. This research is a modification of several studies that relate to those studied. Because no previous research talks about domestic ownership models, foreign ownership and firm size are substantially the same as this study. The linkage in this study states that companies controlled by foreign ownership are better than local ownership (Hooy et al., 2020). Firm size can be positive for the quality of financial reporting (Islam et al., 2023) and negative for audit delay (Ginting & Hidayat, 2019). This reason makes researchers conduct this study because first, the continued impact resulting from the research statement related above. Second, no one has done this research using the financial fraud model.

The industries covered in this study are agriculture, consumer goods, other sectors, and mining. The population of companies used was 160 for five years, so the data included manufacturing companies and as many as 800 observations. The resulting data source is secondary data. The data is made by parties who have the authority to make data and researchers only as information takers on the data that has been made. For example, financial statement data of PT. Indofood Tbk, which has the authority to make financial statements, is the company itself because the company knows the company's condition, not other people who are not part of the company or who are given authority by the company. Data published on the IDX names every company that goes public (IPO) is required to be listed on the Stock Exchange, and every year, it is necessary to provide the company's fundamental condition in the form of financial statements to the IDX. If it is indicated to provide financial reports that are not transparent, it will be suspended by the IDX, so it does not allow the data taken by researchers to be biased.

In research conducted with the object of manufacturing companies, the reason researchers conducted this study is that manufacturing companies listed on the IDX consist of various industrial sub-sectors and have the most significant number of companies, have diverse types of operating sectors, and a large scale of activities compared to other types of companies in Indonesia so that it can be used as a reflection of the overall capital market reaction. Another reason is that manufacturing companies have sustainable production, and good capital and asset management are needed to generate significant profits and provide large investment returns to attract investors to invest their capital.

Meanwhile, the researchers conducted a study with a period of 2016–2020 due to an increase in manufacturing companies in that period, including the phenomenon of the COVID-19 pandemic, where almost the entire world was affected and carried a complete cessation of activities, which caused the company also to stop operating so that operational activities that stopped and the burden of ongoing liabilities made the company go bankrupt or experience a lot. The complexity of management activities is a very high risk of carrying out fraudulent activities. Researchers need to study this period.

The data collection technique is purposive sampling (Creswell & Creswell, 2018). This technique is based on sampling based on purpose. In this study, sampling is based on the purpose of using several criteria taken as analysis data (Table 1):

Table 1. Sampling criteria

Information	*Number of companies*	*Period (year)*	*Observation data*
Population of manufacturing companies for the period 2016–2020	160	5	800
Companies that do not publish financial statements for the period 2016–2020 consecutively	(60)	5	(300)
Sample of companies that publish financial statements for the period 2016–2020 consecutively	100	5	500
Data outlier	(37)	5	(185)
Data analysis	63	5	315

Data using ratio calculations were analyzed in this study. To represent the population, this study used a sample generated by 63 manufacturing companies over five years, and the resulting data was 315 observational data. The resulting data was analyzed using SPSS 23 software. In multiple linear regression analysis using classical assumption test analysis stages consisting of normality test, multicollinearity test, heteroscedasticity test, goodness of fit test (R-square, F-test), and partial test (t-test). Financial fraud uses the Beneish model with the following formula (Stattler & Grabel, 2020; Rostami & Rezaei, 2022; Zack, 2013).

$$M - score = -4.84 + 0.920(DSR) + 0.528(GMI) + 0.404(AQI) + 0.892(SGI) + 0.115(DEPI) - 0.172(SGAI) + 4.670(TATA) - 0.327(LEVI) \quad (1)$$

The index for expressing non-manipulators and manipulators with the Beneisch model with M-score can be classified as firm manipulators if the M-score value is more significant than -2.22, and if the M-score is less than -2.22, it can be expressed as a non-manipulator entity. The investigation revealed financial fraud (FF). In FF, these conditions are based on dummy variables with code 0 for the non-fraud category and code 1 for the fraud category. Table 2 presents in detail the calculation of each element of the M-score, which can later be categorized as the company is a manipulator and non-manipulator:

Table 2. M-score indicator calculation definition

Indicator	*Symbol*	*Formula*
Days sales in receivables index	*DSRI*	$\frac{\frac{Receivable_t}{Sales_t}}{\frac{Receivable_{t-1}}{Sales_{t-1}}}$
Gross margin index	*GMI*	$\frac{\frac{Sales_t - Cost\ of\ sales_t}{Sales_t}}{\frac{Sales_{t-1} - Cost\ of\ sales_{t-1}}{Sales_{t-1}}}$
Asset quality index	*AQI*	$\frac{\frac{1-(Current\ asset_t + PPE_t)}{Total\ asset_t}}{\frac{1-(Current\ asset_{t-1} + PPE_{t-1})}{Total\ asset_{t-1}}}$
Sales growth index	*SGI*	$\frac{Sales_t}{Sales_{t-1}}$
Sales general and administrative expenses index	*SGAI*	$\frac{\frac{SGAI_t}{Sales_t}}{\frac{SGAI_{t-1}}{Sales_{t-1}}}$
Leverage index	*LEV*	$\frac{Leverage_t}{Leverage_{t-1}}$
Total accruals to total assets	*TATA*	$\frac{Net\ income - Cash\ from\ operation}{Total\ asset}$

Source: Mohammed et al. (2021), Ramírez-Orellana et al. (2017), and Rostami and Rezaei (2022).

Financial fraud research is a particular concern for researchers because this research is done well and uses suitable methods in addition to the Beneish M-Score model method. For this study, there is an alternative using a qualitative grounded theory approach with methods in the experience of external audits in detecting financial fraud during routine audits because this method has not been widely explored in audit literature (Kassem & Omoteso, 2023). This method is considered necessary in completing the results of the category of companies committing fraud or not based on primary data with in-depth interviews confirmed with several investigation questions referring to the business activity procedures of external audit work. Grounded theory can help develop new insights into phenomena with less existing literature than confirming previously generated concepts (Matteucci & Gnoth, 2017). The grounded theory approach can be applied to determine the actions of participants and the mechanisms used in the workplace so that this alternative method can be used as a supporting method to be more accurate in assessing whether the company is committing fraud.

Independent variable research includes *Foreign ownership* and *Domestic ownership*, which uses the proportion of foreign and domestic ownership. *Firm size* is generated using the total assets owned by the company and then in Ln (total assets) in the analysis. Foreign ownership is the ownership structure of a company whose management some foreigners' own shares of the company. Domestic ownership is the ownership structure of the company in whose management there are institutions or institutions in the country that hold the company's shares. Table 3 presents in detail the measurement of independent variables:

Table 3. Definition and measurement of independent variables

Variable	*Measurement*	*References*
Foreign ownership (FO)	$\frac{Number\ of\ foreign\ holdings}{Number\ of\ shares\ outstanding} x\ 100\%$	Al-Gamrh et al. (2020), Al Amosh and Khatib (2022), Alkurdi and Mardini (2020), Alshbili et al. (2018), Gu et al. (2019), Hashed and Almaqtari (2021), Koji et al. (2020), Rashid (2020), Syamsudin et al. (2017)
Domestic ownership (DO)	$\frac{Number\ of\ domestic\ holdings}{Number\ of\ shares\ outstanding} x\ 100\%$	Lindemanis et al. (2022), Sunday and Kwenda (2021), Syamsudin et al. (2017)
Firm size (FS)	*Ln (Total asset)*	Al Amosh and Khatib (2022), Alkurdi and Mardini (2020), Alshbili et al. (2018), Koji et al. (2020), Rustam et al. (2019), Syamsudin et al. (2017)

The model produced in this study uses multiple linear regression models. This model uses an empirical studies model approach where the resulting model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \quad (2)$$

where Y is the dependent variable with the measurement of financial fraud while X is an independent variable consisting of three, namely 1) foreign ownership ($X_1 = FO$), 2) domestic ownership ($X_2 = DO$), and 3) firm size with total proxy assets ($X_3 = FS$).

4. RESULTS AND DISCUSSION

4.1. Statistical description

This description highlights the entire sample produced by looking at the average, minimum, maximum, and standard deviation values. The average value of foreign ownership is 31.2378%, domestic ownership is 39.1990%, firm size is IDR 13526892.54, and M-Score is -1.2699. The minimum value of foreign ownership is 0.00, domestic ownership is 0.00, firm size is IDR 89019, and M-Score is -7.71. The maximum value of foreign ownership is 98.60%, domestic ownership is 95.72%, firm size is IDR 452635312, and M-Score is 7.81. The standard deviation value of foreign ownership is 33.02%, domestic ownership is 28.48359%, firm size is IDR 44957626.27, and M-Score is 1.13530.

Table 4. Statistical description

Variable	*N*	*Mean*	*Min*	*Max*	*Std. Deviation*
FO	315	31.2378%	0.00%	98.60%	33.02117%
DO	315	39.1990%	0.00%	95.72%	28.48359%
FS	315	IDR 13526892.54	IDR 89019	IDR 452635312	IDR 44957626.27
M-Score	315	-1.2699	-7.71	7.81	1.13530

Note: M-Score determines fraud or non-fraud.

Viewed in the M-Score used to predict companies having manipulator or non-manipulator categories so that from the entire sample used as many as 315 observation data with 63 manufacturing companies listed on the IDX are presented as follows:

Table 5. Data fraud financial description

Category	*Frequency*	*Percent*
Non-manipulator	36	11.4%
Manipulator	279	88.6%
Total	**315**	**100%**

Note: Manipulator is number 1; non-manipulator is number 0.

The sample was produced according to Table 5 of the 315-observation data used in this study. There were 279 observation data on manufacturing companies that can be stated according to calculations with the Beneish M-Score model being manipulators while conservation data on manufacturing companies that are declared non-manipulators according to the Beneish M-Score model with as many as 36 observational data. This illustrates that the majority of manufacturing companies commit financial company fraud. This is possible so that the company gets a positive signal from the market, implying investors are interested in investing in the company.

From the data that has been produced, several companies that are not classified as manipulator companies, but companies that are classified as non-manipulators are not seen in 1 complete observation in the period studied, such as manufacturing companies that code AALI, only those categorized as non-manipulators in 2016, while others in 2017–2020 are declared manipulators. It applies to 22 manufacturing companies; not all in five periods are advised non-manipulators, but only a few manipulators and 41 other manufacturing companies have a comprehensive level of financial fraud in 2016–2020, so manufacturing companies in Indonesia need a level of honesty and strict supervision in companies carrying out financial reporting in a transparent manner to provide confidence in investors in investing their funds.

This finding provides data on 63 manufacturing companies listed on the IDX with companies that do not fully manipulate financial statements; 22 companies are small-scale non-manipulators of financial statements.

4.2. Result

In this section, we will discuss the research results that will prove that the results can be accepted or rejected by previous research. The results of the study are presented in Table 6:

Table 6. Multiple linear regression test results

Variable	*Coefficient β*	*t*	*Sig.*
FO	0.009	2.388	0.018*
DO	0.014	3.088	0.002**
FS	-0.203	-5.231	0.000**
Constant	0.953		
R-squared	0.114		
F	13.360		
F Sig.	0.000		

*Note: * sig. at the 5% level; ** sig. at the 1% level.*
FF: Financial fraud.

It can be seen that the results of the analysis presented in Table 6 above show that the regression model in its econometric form is as follows:

$$FF = 0.953 + 0.009FO + 0.014DO - 0.203SC + \varepsilon \quad (3)$$
$$\text{Sig.:} \quad (0.018)^{*} \quad (0.002)^{**} \quad (0.000)^{**}$$

This result shows that the constant in this regression model is 0.953, which means that if foreign ownership, domestic ownership, or firm size is constant, financial fraud is 0.953. Foreign ownership has a significant positive effect on financial fraud, according to the results presented in Table 6. This means the more significant the company's foreign ownership, the stronger it is in committing financial fraud. A robust foreign ownership may be able to control the company to create opportunities for foreign shareholders to conduct financial fraud. These results do not correspond to empirical evidence. Beuselinck et al. (2017) explained that high foreign ownership would improve the quality of financial reporting. This illustrates that a better quality of reporting will make financial fraud less. According to Kusuma and Fitriani (2020), the resulting impact of increased foreign ownership is declining financial fraud. In the analysis, inconsistencies in the results may be different empirical studies and the number of samples used. Not much research has been studied, making these results new findings according to the authors' knowledge.

Domestic ownership also has a significant positive effect on financial fraud. The results presented in Table 6 indicates that the greater the domestic ownership of a company, the greater its power to control its activities internally, which has the opportunity to increase the practice of financial fraud. According to Nagata and Nguyen (2017), foreign and domestic ownership are more likely to be timely, voluntary management forecasting. This reveals that active investors can provide a better boost in disclosing a company's financial information. According to Alzoubi (2016), ownership structures are more effective in performing management actions, which leads to lower profit management and higher-quality financial reporting. Some of these studies do not follow the results of this study, and to the authors' knowledge, no one has made a relationship between domestic ownership and financial fraud, so there has been no previous research.

It is concluded that foreign and domestic ownership with an increased percentage of ownership will further strengthen companies in committing fraud. In the agency theory perspective, principles have desires to be achieved while management also has desires, so if the principle and management do not balance goals, conflicts occur, and stakeholders will try to control management to fulfill desires. However, the management will provide asymmetric information in achieving its wishes. This will lead to opportunities for financial fraud.

While the firm size has a significant negative effect on financial fraud, the firm size indicates that the increasing size of the company will provide opportunities for smaller companies to commit financial fraud, with the results presented in Table 3. According to Nalarreason et al. (2019), consistent agency theory and positive accounting show that the company size positively impacts profit management. This indicates that a high firm size encourages management to manipulate profits. According to Islam et al. (2023), the company size has a positive relationship with the quality of the internal audit function. At the same time, the company size is significant against abnormal accruals (financial reporting quality).

4.3. Discussion

Based on the results, foreign ownership significantly positively affects corporate financial fraud. This indicates that foreign companies may have information systems that are more efficient in meeting internal and parent company needs (Zakaria et al., 2016) as well as the possibility of greater demand on foreign-based companies from customers, suppliers, and the general public (Baker et al., 2023). This makes companies with more significant foreign holdings less likely to increase profit management activities (Shayan-Nia et al., 2017) due to pressure on the part of the owner to get a high level of profit.

Domestic ownership has a significant positive effect on corporate financial fraud. This indicates that domestic ownership has the competence to supervise and protect the rights of minority shareholders (D. Chen et al., 2018) so that the decision can be considered. The existence of ownership of an organization in a company is a sign that it is putting pressure on the company itself (Rezaee, 2005). Pressure arises when management takes greater responsibility for accountability to the institution (Hall et al., 2007; Zahra et al., 2007). In addition, significant equity holdings held by domestic (institutional) rather than individuals force management to make further efforts to avoid losing such investors, such as by manipulating financial statements (Burgstahler et al., 2006).

The size of the company has a significant negative effect on corporate financial fraud. Company size is an essential factor related to ownership structure because the more effective the company size is, the more information there is for investors concerning the investment made. Large companies are more likely to have a very high public demand for information when compared to small companies (Ball, 2001; Farber, 2005). Large companies are more concerned by the public, so they will be more careful in financial reporting (Hirshleifer & Teoh, 2003). As a result, the company reported its condition more accurately. The greater the assets a company owns, the more the company can effectively reduce the impact of financial reporting fraud (Fathmaningrum & Anggarani, 2021; Syamsudin et al., 2017). This illustrates that close supervision from the government, analysts, and investors who participate in running the company causes managers not to dare to do earning management.

5. CONCLUSION

Principle and agent conflicts have always been a growing problem in large and small-scale companies. Especially from the perspective of ownership structures such as foreign, domestic, manager, and other ownership. Although substantially similar research is still limited and rare in investigating cheating relationships. Therefore, it reminds investors to allocate their capital to the company and monitor not only from the management side but also the ownership structure and corporate governance's role. A comprehensive study of ownership structure and firm size affects financial fraud. This research proves the effect of foreign ownership, domestic ownership, and firm size on financial fraud.

The findings of this study show that ownership structure (foreign and domestic ownership) has a significant positive impact on financial fraud, while firm size has a negative impact on financial fraud. From the linkage of ownership structure, this study shows that companies controlled by foreign stakeholders are better than those owned by local shareholders (Hooy et al., 2020). It can be interpreted that foreign ownership has more robust control and supervision than local ownership so that foreign ownership can minimize fraud that occurs in local ownership. Compared with the results found, it means that the results of the study rejected foreign ownership of financial fraud because the results of the findings are contrary to existing research statements. The results on domestic ownership of financial fraud are accepted because the results are in line with related research statements. The size of the company indicates that it will reduce the company in carrying out manipulation so that the results of this study seen from previous research related to fraud are declared accepted because, according to Islam et al. (2023), the size of the company has a positive impact on the quality of financial reporting and also audit delays can be minimized (Ginting & Hidayat, 2019). This means that the better quality of financial reporting will reflect more minor acts of fraud.

This research provides insight for many future studies aimed at understanding the phenomenon of financial fraud better, and the limitations of this research are: when it comes to organizational aspects in the company, there are many studies on fraud with several methods directed at the motive of fraud so that an in-depth aspect study is needed. The first aspect is to analyze collective acts of fraud that can have the risk of fraud. Second, exploring a concrete reason for encouraging management to disclose fraud or report irregularities is necessary. Further studies can deepen the effect of rewards for whistleblowers and trust and protection for whistleblowers in revealing fraud. Third, additional research can discuss the relationship between the audit committee of a company and the management of the company, especially the importance of the role of the chairman of the audit committee both from the point of view of his relationship with the audit committee and with the company's management. The problem of fraud behavior developed with a code of ethics model in shaping the company's absolute financial transparency is a proposed research line in the future in looking at conflicts of interest and the occurrence of fraud.

In addition, from our point of view, the most severe limitation of fraud based on the perspective of moral hazard is to ignore the impact of profit pressure in driving risk and fraud. In this case, fraud is suspected to be a relationship between profit pressure and unwanted organizational behavior. According to Pernell and Jung (2024), much empirical evidence has found that companies become more likely to cross the line into illegal actions or irregularities when they face more substantial pressure, either from shareholders, the need to respond to competitors, or slow profit growth (e.g., declining profits). Hence, research must mitigate excessive risk-taking in isolating organizations from resource-based profitability pressures that can trigger risky behavior. In terms of samples, this research results use samples of manufacturing companies that allow the need for additional samples in the future to be used as a level of accuracy in generalizing research results to the object of research.

After knowing the results and the contributions built, the study has two policy implications: first, this study provides academic contributions and insight into investors being careful in investing and managing in building companies with market value. Second, this study contributes to the regulatory effect that internal control companies will become more dominant in companies committing fraud. The reason is that high domestic and foreign ownership will give foreign and domestic investors the flexibility to manage finances as desired. Then, further study deepens the addition of research models by providing variables that can impact financial fraud to identify better the company's ownership structure and further the company's governance mechanisms or other internal and external factors. In addition, the study is accompanied by the submission of financial statement comments not only annually but quarterly or monthly published on the IDX or each related company website. This can help track and analyze every process of the company's trading activity, which makes it possible to see the company's financial situation in the event of unusual movements regardless of the jurisdiction of related parties.

REFERENCES

Abbas, D. S., Ismail, T., Taqi, M., & Yazid, H. (2021). Determinants of enterprise risk management disclosures: Evidence from insurance industry. *Accounting, 7*(6), 1331–1338. https://doi.org/10.5267/j.ac.2021.4.005

Adhikary, B. K., Mitra, R. K., & Meah, M. R. (2021). Do manufacturing firms in Bangladesh engage in earnings management to avoid losses? Further evidence using the governance elements as monitors. *Journal of Financial Reporting and Accounting, 19*(5), 839–860. https://doi.org/10.1108/JFRA-05-2020-0131

Adiyanto, Y. (2021). The influence of institutional ownership, liquidity, and company size on financial distress: Empirical study on property & real estate sub sector companies listed on the Indonesia Stock Exchange 2015–2018. *International Journal of Economics, Management, Business and Social Science (IJEMBIS), 1*(1), 111–120. https://cvodis.com/ijembis/index.php/ijembis/article/view/9

Al Amosh, H., & Khatib, S. F. A. (2022). Ownership structure and environmental, social and governance performance disclosure: The moderating role of the board independence. *Journal of Business and Socio-Economic Development, 2*(1), 49–66. https://doi.org/10.1108/JBSED-07-2021-0094

Al-Gamrh, B., Al-Dhamari, R., Jalan, A., & Afshar Jahanshahi, A. (2020). The impact of board independence and foreign ownership on financial and social performance of firms: evidence from the UAE. *Journal of Applied Accounting Research, 21*(2), 201–229. https://doi.org/10.1108/JAAR-09-2018-0147

Alkurdi, A., & Mardini, G. H. (2020). The impact of ownership structure and the board of directors' composition on tax avoidance strategies: Empirical evidence from Jordan. *Journal of Financial Reporting and Accounting, 18*(4), 795–812. https://doi.org/10.1108/JFRA-01-2020-0001

Alshbili, I., Elamer, A. A., & Beddewela, E. (2018). Ownership types, corporate governance and corporate social responsibility disclosures: Empirical evidence from a developing country. *Accounting Research Journal, 33*(1), 148–166. https://doi.org/10.1108/ARJ-03-2018-0060

Alzoubi, E. S. S. (2016). Ownership structure and earnings management: Evidence from Jordan. *International Journal of Accounting & Information Management, 24*(2), 135–161. https://doi.org/10.1108/IJAIM-06-2015-0031

Baah, C., Opoku-Agyeman, D., Acquah, I. S. K., Agyabeng-Mensah, Y., Afum, E., Faibil, D., & Abdoulaye, F. A. M. (2021). Examining the correlations between stakeholder pressures, green production practices, firm reputation, environmental and financial performance: Evidence from manufacturing SMEs. *Sustainable Production and Consumption, 27*, 100–114. https://doi.org/10.1016/j.spc.2020.10.015

Baker, H. K., Benedetti, H., Nikbakht, E., & Smith, S. S. (Eds.). (2023). Discussion questions and answers: Chapters 2–22. In *The Emerald handbook on cryptoassets: Investment opportunities and challenges* (pp. 355–381). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80455-320-620221030

Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookings-Wharton Papers on Financial Services, 2001*(1), 127–169. https://doi.org/10.1353/pfs.2001.0002

Beuselinck, C., Blanco, B., & García Lara, J. M. (2017). The Role of foreign shareholders in disciplining financial reporting. *Journal of Business Finance and Accounting, 44*(5–6), 558–592. https://doi.org/10.1111/jbfa.12239

Burgstahler, D. C., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review, 81*(5), 983–1016. https://doi.org/10.2308/accr.2006.81.5.983

Campbell, J. L., Twedt, B. J., & Whipple, B. C. (2021). Trading prior to the disclosure of material information: Evidence from regulation fair disclosure form 8-Ks. *Contemporary Accounting Research, 38*(1), 412–442. https://doi.org/10.1111/1911-3846.12610

Çelik, B., Özer, G., & Merter, A. K. (2023). The effect of ownership structure on financial reporting timeliness: An implementation on Borsa Istanbul. *SAGE Open, 13*(4), 1–18. https://doi.org/10.1177/21582440231207458

Chen, D., Chen, Y., Li, O. Z., & Ni, C. (2018). Foreign residency rights and corporate fraud. *Journal of Corporate Finance, 51*, 142–163. https://doi.org/10.1016/j.jcorpfin.2018.05.004

Chen, G., Chen, X., & Wan, P. (2022). Naive independent directors, corporate governance and firm performance. *Frontiers in Psychology, 13*(18), 1–16. https://doi.org/10.3389/fpsyg.2022.984661

Chen, Y., Huang, P., Ku, Y., Ni, Y., Chie, B.-T., & Lin, Y.-T. (2022). Does ownership structure matter for overshooting manipulation of hospitality and tourism stocks? *Heliyon, 8*(11), Article e11544. https://doi.org/10.1016/j.heliyon.2022.e11544

Choi, D., Gam, Y. K., & Shin, H. (2020). Corporate fraud under pyramidal ownership structure: Evidence from a regulatory reform. *Emerging Markets Review, 45*, Article 100726. https://doi.org/10.1016/j.ememar.2020.100726

Chung, C. Y., Kim, H., & Wang, K. (2022). Do domestic or foreign institutional investors matter? The case of firm information asymmetry in Korea. *Pacific-Basin Finance Journal, 72*, Article 101727. https://doi.org/10.1016/j.pacfin.2022.101727

Creswell, W. J., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative and mixed methods approaches* (5th ed.). SAGE Publications Ltd. https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf

Cuervo-Cazurra, A., & Li, C. (2021). State ownership and internationalization: The advantage and disadvantage of stateness. *Journal of World Business, 56*(1), Article 101112. https://doi.org/10.1016/j.jwb.2020.101112

de Souza, J. A. S., Rissatti, J. C., Rover, S., & Borba, J. A. (2019). The linguistic complexities of narrative accounting disclosure on financial statements: An analysis based on readability characteristics. *Research in International Business and Finance, 48*, 59–74. https://doi.org/10.1016/j.ribaf.2018.12.008

Debnath, P., Dey, B. K., Mazumdar, N., Das, S., & Gachuiwo, H. (2022). Demystifying the nexus between ownership structure and performance: A study of the emerging market [Special issue]. *Corporate and Business Strategy Review, 3*(2), 306–320. https://doi.org/10.22495/cbsrv3i2siart12

Ding, H. (2023). Supervision or collusion? Common institutional ownership and corporate R&D manipulation. *Journal of Innovation and Development, 3*(2), 74–83. https://doi.org/10.54097/jid.v3i2.9389

Dong, N., Wang, F., Zhang, J., & Zhou, J. (2020). Ownership structure and real earnings management: Evidence from China. *Journal of Accounting and Public Policy, 39*(3), Article 106733. https://doi.org/10.1016/j.jaccpubpol.2020.106733

Douma, S., George, R., & Kabir, R. (2006). Foreign and domestic ownership, business groups, and firm performance: Evidence from a large emerging market. *Strategic Management Journal, 27*(7), 637–657. https://doi.org/10.1002/smj.535

Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *The Accounting Review, 80*(2), 539–561. https://doi.org/10.2308/accr.2005.80.2.539

Fathmaningrum, E. S., & Anggarani, G. (2021). Fraud Pentagon and fraudulent financial reporting: Evidence from manufacturing companies in Indonesia and Malaysia. *Journal of Accounting and Investment, 22*(3), 625–646. https://doi.org/10.18196/jai.v22i3.12538

Gangi, F., Meles, A., Monferrà, S., & Mustilli, M. (2020). Does corporate social responsibility help the survivorship of SMEs and large firms? *Global Finance Journal, 43*, Article 100402. https://doi.org/10.1016/j.gfj.2018.01.006

Gao, H., Shen, Z., Li, Y., Mao, X., & Shi, Y. (2020). Institutional investors, real earnings management and cost of equity: Evidence from listed high-tech firms in China. *Emerging Markets Finance and Trade, 56*(14), 3490–3506. https://doi.org/10.1080/1540496X.2019.1650348

Ginting, C. U., & Hidayat, W. (2019). The effect of a fraudulent financial statement, firm size, profitability, and audit firm size on audit delay. *International Journal of Innovation, Creativity and Change, 9*(7), 323–341. https://www.ijicc.net/images/vol9iss7/9723_Ginting_2019_E_R.pdf

Gu, V. C., Cao, R. Q., & Wang, J. (2019). Foreign ownership and performance: mediating and moderating effects. *Review of International Business and Strategy, 29*(2), 86–102. https://doi.org/10.1108/RIBS-08-2018-0068

Hall, A. T., Bowen, M. G., Ferris, G. R., Royle, M. T., & Fitzgibbons, D. E. (2007). The accountability lens: A new way to view management issues. *Business Horizons, 50*(5), 405–413. https://doi.org/10.1016/j.bushor.2007.04.005

Handoko, B. L., Lindawati, A. S. L., & Saputra, O. (2020). The influence of performance, size, debt on report lag in food and beverage sector. *Test Engineering and Management, 83*(5), 1–9. https://www.researchgate.net/publication/341325941_THE_INFLUENCE_OF_PERFORMANCE_SIZE_DEBT_ON_REPORT_LAG_IN_FOOD_AND_BEVERAGE_SECTOR

Handoko, B. L., Muljo, H. H., & Lindawati, A. S. L. (2019). The effect of company size, liquidity, profitability, solvability, and audit firm size on audit delay. *International Journal of Recent Technology and Engineering (IJRTE), 8*(3), 6252–6258. https://doi.org/10.35940/ijrte.C5837.098319

Hasan, A., Aly, D., & Hussainey, K. (2022). Corporate governance and financial reporting quality: A comparative study. *Corporate Governance, 22*(6), 1308–1326. https://doi.org/10.1108/CG-08-2021-0298

Hashed, A. A., & Almaqtari, F. A. (2021). The impact of corporate governance mechanisms and IFRS on earning management in Saudi Arabia. *Accounting, 7*(1), 207–224. https://doi.org/10.5267/j.ac.2020.9.015

Hirshleifer, D., & Teoh, S. H. (2003). Limited attention, information disclosure, and financial reporting. *Journal of Accounting and Economics, 36*(1–3), 337–386. https://doi.org/10.1016/j.jacceco.2003.10.002

Hooy, G.-K., Hooy, C.-W., & Chee, H.-K. (2020). Ultimate ownership, control mechanism, and firm performance: Evidence from Malaysian firms. *Emerging Markets Finance and Trade, 56*(15), 3805–3828. https://doi.org/10.1080/1540496X.2019.1584101

Islam, M., Slof, J., & Albitar, K. (2023). The mediation effect of audit committee quality and internal audit function quality on the firm size–financial reporting quality nexus. *Journal of Applied Accounting Research, 24*(5), 839–858. https://doi.org/10.1108/JAAR-06-2022-0153

Kassem, R., & Omoteso, K. (2023). Effective methods for detecting fraudulent financial reporting: practical insights from Big 4 auditors. *Journal of Accounting Literature.* Advance online publication. https://doi.org/10.1108/JAL-03-2023-0055

Koji, K., Adhikary, B. K., & Tram, L. (2020). Corporate governance and firm performance: A comparative analysis between listed family and non-family firms in Japan. *Journal of Risk and Financial Management, 13*(9), Article 215. https://doi.org/10.3390/jrfm13090215

Kostyuk, A., Govorun, D., Neselevska, O., Iefymenko, V., & Gyrba, O. (2011). Corporate governance and performance: Stakes on ownership? Empirical research of the Ukrainian banks. *Corporate Ownership and Control, 8*(4–5), 532–550. https://doi.org/10.22495/cocv8i4c5art7

Kusuma, H., & Fitriani, N. (2020). Ownership structure and the likelihood of financial reporting fraud. *International Journal of Innovation, Creativity and Change, 13*(1), 121–140. https://ww.ijicc.net/images/vol_13/13110_Kusuma_2020_E_R.pdf

Liang, Q., Gao, W., & Xie, H. (2022). Do foreign investors deter corporate fraud? Evidence from China. *The Quarterly Review of Economics and Finance, 84*, 92–111. https://doi.org/10.1016/j.qref.2022.01.002

Liedong, T. A., Aghanya, D., Jimenez, A., & Rajwani, T. (2023). Corporate political activity and bribery in Africa: Do internet penetration and foreign ownership matter? *Journal of Business Research, 154*, Article 113326. https://doi.org/10.1016/j.jbusres.2022.113326

Lin, H.-P., Walker, M. M., & Wang, Y.-J. (2020). Shareholder wealth effects of corporate fraud: Evidence from Taiwan's securities investor and futures trader protection act. *International Review of Economics & Finance, 65*, 222–243. https://doi.org/10.1016/j.iref.2019.09.010

Lindemanis, M., Loze, A., & Pajuste, A. (2022). The effect of domestic to foreign ownership change on firm performance in Europe. *International Review of Financial Analysis, 81*, Article 101341. https://doi.org/10.1016/j.irfa.2019.04.004

Lizarzaburu, E., García-Gómez, C. D., & Kostyuk, A. (2023). Institutional investors and corporate risk at the origin of the international financial crisis [Special issue]. *Journal of Governance and Regulation, 12*(4), 244–255. https://doi.org/10.22495/jgrv12i4siart4

Ma, G., Wang, Y., Xu, Y., & Zhang, L. (2023). The breadth of ownership and corporate earnings management. *Finance Research Letters, 52*, Article 103549. https://doi.org/10.1016/j.frl.2022.103549

Matteucci, X., & Gnoth, J. (2017). Elaborating on grounded theory in tourism research. *Annals of Tourism Research, 65*, 49–59. https://doi.org/10.1016/j.annals.2017.05.003

Mavengere, K. (2015). Predicting corporate bankruptcy and earnings manipulation using the Altman Z-score and Beneish M score. The case of Z manufacturing firm in Zimbabwe. *International Journal of Management Sciences and Business Research, 4*(10), 8–14. https://ssrn.com/abstract=2739676

Mohammed, N. F., Sutainim, N. A., Islam, M. S., & Mohamed, N. (2021). Integrated thinking, earnings manipulation and value creation: Malaysian empirical evidence. *Business Process Management Journal, 27*(4), 1179–1199. https://doi.org/10.1108/BPMJ-06-2020-0261

Nagata, K., & Nguyen, P. (2017). Ownership structure and disclosure quality: Evidence from management forecasts revisions in Japan. *Journal of Accounting and Public Policy, 36*(6), 451–467. https://doi.org/10.1016/j.jaccpubpol.2017.09.003

Nalarreason, K. M., T, S., & Mardiati, E. (2019). Impact of leverage and firm size on earnings management in Indonesia. *International Journal of Multicultural and Multireligious Understanding, 6*(1), 19–24. https://doi.org/10.18415/ijmmu.v6i1.473

Nazir, M. S., & Afza, T. (2018). Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market. *Future Business Journal, 4*(1), 139–156. https://doi.org/10.1016/j.fbj.2018.03.001

Otengkoramah Badoo, D., Hammond, H., & Oppong, F. (2020). Assessment of internal control systems of technical universities in Ghana. *Journal of Finance and Accounting, 8*(2), 64–72. https://doi.org/10.11648/j.jfa.20200802.12

Oyerogba, E. O. (2021). Forensic auditing mechanism and fraud detection: The case of Nigerian public sector. *Journal of Accounting in Emerging Economies, 11*(5), 752–775. https://doi.org/10.1108/JAEE-04-2020-0072

Pernell, K., & Jung, J. (2024). Rethinking moral hazard: government protection and bank risk-taking. *Socio-Economic Review, 22*(2), 625–653. https://doi.org/10.1093/ser/mwad050

PricewaterhouseCoopers. (PwC). (2016). Economic crime from the board to the ground: Why a disconnect is putting Malaysian companies at risk (Global Economic Crime Survey (Malaysia Report)). https://www.pwc.com/my/en/assets/publications/gecs-report-2016.pdf

Ramírez-Orellana, A., Martínez-Romero, M. J., & Marino-Garrido, T. (2017). Detección de fraude y de manipulación de beneficios a través de un caso de estudio: Evidencia de una empresa familiar internacional [Measuring fraud and earnings management by a case of study: Evidence from an international family business]. *European Journal of Family Business, 7*(1–2), 41–53. https://doi.org/10.1016/j.ejfb.2017.10.001

Ramos Montesdeoca, M., Sánchez Medina, A. J., & Blázquez Santana, F. (2019). Research topics in accounting fraud in the 21st century: A state of the art. *Sustainability, 11*(6), Article 1570. https://doi.org/10.3390/su11061570

Rashid, M. M. (2020). Ownership structure and firm performance: the mediating role of board characteristics. *Corporate Governance, 20*(4), 719–737. https://doi.org/10.1108/CG-02-2019-0056

Rezaee, Z. (2005). Causes, consequences, and deterence of financial statement fraud. *Critical Perspectives on Accounting, 16*(3), 277–298. https://doi.org/10.1016/S1045-2354(03)00072-8

Rostami, V., & Rezaei, L. (2022). Corporate governance and fraudulent financial reporting. *Journal of Financial Crime, 29*(3), 1009–1026. https://doi.org/10.1108/JFC-07-2021-0160

Rusmin, R., Evans, J., & Hossain, M. (2012). Ownership structure, political connection and firm performance: Evidence from Indonesia. *Corporate Ownership and Control, 10*(1–4), 434–443. https://doi.org/10.22495/cocv10i1c4art4

Rustam, A., Wang, Y., & Zameer, H. (2019). Does foreign ownership affect corporate sustainability disclosure in Pakistan? A sequential mixed methods approach. *Environmental Science and Pollution Research, 26*(30), 31178–31197. https://doi.org/10.1007/s11356-019-06250-3

Sekaran, U., & Bougie, R. (2010). *Research methods for business* (5th ed.). John Wiley and Sons, Ltd., Publication. https://9afi.com/storage/daftar/onTXVlzEDQNtC4khg3Yklhj0g5V5wyFsQqNDZOpL.pdf

Setia-Atmaja, L. (2016). The impact of family control on dividend policy: Evidence from Indonesia. *International Research Journal of Business Studies, 9*(3), 147–156. https://doi.org/10.21632/irjbs.9.2.147-156

Shayan-Nia, M., Sinnadurai, P., Mohd-Sanusi, Z., & Hermawan, A.-N. A. (2017). How efficient ownership structure monitors income manipulation? Evidence of real earnings management among Malaysian firms. *Research in International Business and Finance, 41*, 54–66. https://doi.org/10.1016/j.ribaf.2017.04.013

Sikka, P., & Stittle, J. (2019). Debunking the myth of shareholder ownership of companies: Some implications for corporate governance and financial reporting. *Critical Perspectives on Accounting, 63*, Article 101992. https://doi.org/10.1016/j.cpa.2017.03.011

Siregar, S. V., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *International Journal of Accounting, 43*(1), 1–27. https://doi.org/10.1016/j.intacc.2008.01.001

Stattler, E., & Grabel, J. A. (Eds.). (2020). Financial statement fraud. In *The master guide to controllers' best practices* (2nd ed., pp. 445–448). Institute of Management Accountants, Inc. https://doi.org/10.1002/9781119723349.ch15

Sukmadilaga, C., Winarningsih, S., Handayani, T., Herianti, E., & Ghani, E. K. (2022). Fraudulent financial reporting in ministerial and governmental institutions in Indonesia: An analysis using Hexagon theory. *Economies, 10*(4), Article 86. https://doi.org/10.3390/economies10040086

Sun, G., Li, T., Ai, Y., & Li, Q. (2023). Digital finance and corporate financial fraud. *International Review of Financial Analysis, 87*, Article 102566. https://doi.org/10.1016/j.irfa.2023.102566

Sunday, A. A., & Kwenda, F. (2021). Corporate ownership structure and firm value: Empirical evidence of JSE-listed firms, South Africa. *Eurasian Journal of Economics and Finance, 9*(2), 89–106. https://doi.org/10.15604/ejef.2021.09.02.003

Susianti, S., & Oktorina, M. (2023). Integrated reporting: Analysis based on the ownership characteristics and its impact on firm value. In *Proceedings of the 6th International Conference of Economics, Business, and Entrepreneurship, ICEBE*. EAI. https://doi.org/10.4108/eai.13-9-2023.2341204

Syamsudin, S., Imronudin, I., Utomo, S. T., & Praswati, A. N. (2017). Corporate governance in detecting lack of financial report. *Jurnal Dinamika Manajemen, 8*(2), 167–176. https://doi.org/10.15294/jdm.v8i2.12757

Tang, X., Gu, Y., Weng, R., & Ho, K. (2022). Confucianism and corporate fraud. *International Journal of Emerging Markets, 17*(6), 1425–1445. https://doi.org/10.1108/IJOEM-12-2019-1004

Tayem, G. (2022). Ownership, control, group affiliations, and wealth concentration: The case of a developing market [Special issue]. *Journal of Governance and Regulation, 11*(1), 376–388. https://doi.org/10.22495/jgrv11i1siart16

Tokas, K., & Yadav, K. (2023). Foreign ownership and corporate social responsibility: The case of an emerging market. *Global Business Review, 24*(6), 1302–1325. https://doi.org/10.1177/0972150920920444

Tran, T. T., Hai Do, Y. T., & Kim Vo, N. (2023). The impact of foreign ownership, corporate governance on earning management: Fuzzy-set qualitative comparative analysis. *Cogent Business & Management, 10*(3), Article 2247869. https://doi.org/10.1080/23311975.2023.2247869

Turshan, M. N., & Karim, N. A. (2022). Ownership structure and agency costs: Evidence of emerging economy [Special issue]. *Corporate Governance and Organizational Behavior Review, 6*(4), 246–252. https://doi.org/10.22495/cgobrv6i4sip5

Vian, T. (2020). Anti-corruption, transparency and accountability in health: Concepts, frameworks, and approaches. *Global Health Action, 13*(sup1), Article 1694744. https://doi.org/10.1080/16549716.2019.1694744

Vitolla, F., Raimo, N., Rubino, M., & Garzoni, A. (2019). How pressure from stakeholders affects integrated reporting quality. *Corporate Social Responsibility and Environmental Management, 26*(6), 1591–1606. https://doi.org/10.1002/csr.1850

Yiu, D. W., Wan, W. P., & Xu, Y. (2019). Alternative governance and corporate financial fraud in transition economies: Evidence from China. *Journal of Management, 45*(7), 2685–2720. https://doi.org/10.1177/0149206318764296

Yusrianti, H., Ghozali, I., Yuyetta, E., Aryanto, A. & Meirawati, E. (2020). Financial statement fraud risk factors of fraud triangle: Evidence from Indonesia. *International Journal of Financial Research, 11*(4), 36–51. https://doi.org/10.5430/ijfr.v11n4p36

Zack, G. M. (2013). *Financial statement fraud: Strategies for detection and investigation*. John & Sons, Inc. https://doi.org/10.1002/9781118527436

Zahra, S. A., Priem, R. L., & Rasheed, A. A. (2007). Understanding the causes and effects of top management fraud. *Organizational Dynamics, 36*(2), 122–139. https://doi.org/10.1016/j.orgdyn.2007.03.002

Zakaria, K. M., Nawawi, A., & Salin, A. S. A. P. (2016). Internal controls and fraud — Empirical evidence from oil and gas company. *Journal of Financial Crime, 23*(4), 1154–1168. https://doi.org/10.1108/JFC-04-2016-0021

Zhang, L. (2020). The effects of trading rights and ownership structures on the informativeness of accounting earnings: Evidence from China' split share structure reform. *Research in International Business and Finance, 51*, Article 101110. https://doi.org/10.1016/j.ribaf.2019.101110

Zhang, M., Wang, A., & Zhou, S. (2023). Effect of analysts' earnings pressure on environmental information disclosure of firms: Can corporate governance alleviate the earnings obsession? *Borsa Istanbul Review, 23*(2), 495–515. https://doi.org/10.1016/j.bir.2022.12.001

Zhou, W., & Kapoor, G. (2011). Detecting evolutionary financial statement fraud. *Decision Support Systems, 50*(3), 570–575. https://doi.org/10.1016/j.dss.2010.08.007