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To what extent does share ownership affect informative earnings management? Evidence from Indonesian manufacturing sector

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ABSTRACT

Inconsistent findings regarding the relationship between share ownership and earnings management, specifically in terms of informative and opportunistic practices, have been observed in previous studies. To address this gap, the present research aims to investigate the impact of institutional, governmental, and family ownership on informative earnings management. The sample comprises 615 manufacturing firm-year observations listed on the Indonesian Stock Exchange. Earnings management is assessed by examining discretionary accruals, which are further categorized into informative and opportunistic acts based on earnings growth. Logistic regression analysis is employed to analyze the data. The results indicate that both institutional and family ownership have a positive effect on informative earnings management. This suggests that institutional and family shareholders play influential roles in monitoring managerial behavior, particularly in encouraging informative earnings management practices rather than opportunistic ones. Conversely, governmental ownership does not have a significant effect on earnings management. This finding suggests that government shareholders may have lesser interest in evaluating managerial performance based on earnings and instead prioritize political and social considerations. Overall, this study contributes to the existing literature by shedding light on the distinct influences of different types of share ownership on earnings management practices, particularly in terms of their impact on informative earnings management.

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INTRODUCTION

In recent years, research focusing on family ownership, institutional ownership, government ownership, and earnings management has garnered significant attention from researchers,

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practitioners, and regulators. (Ahmad et al., 2023; Avabruth & Padhi, 2023; Bao & Lewellyn, 2017; Chen et al., 2023; Kumala & Siregar 2021; Le & Moore, 2023; Lemma et al., 2018; Mensah & Boachie 2023; Rahman et al., 2023; Rahman & Zheng, 2023; Wan Mohammad & Wasiuzzaman, 2020; Xie et al., 2022; Zheng et al., 2023)

Earnings management can be seen as an opportunist act or an efficient contract (Scott, 2014). Opportunist act leads earnings management to make the information gap bigger, while efficient contract perspective allows earnings management as informative behaviour and increase earnings quality (Ehsan et al., 2022). Agency theory suggests that conflict of interest between shareholders and manager raise information asymmetry (Gim & Jang, 2023). The manager uses it to maximize their utility in opportunist earnings management behaviour (Athamena et al., 2023). The role of shareholders is important to watch over the manager's behaviour. Since earnings management exists because of the relationship between shareholders and management, share ownership determines the extent of earnings management behaviour (Shang & Ci, 2023).

Some types of ownership carry out different monitoring functions related to earnings management. First, institutional shareholders can own firm shares, which refers to institutional ownership. Since institutional shareholders have better business knowledge than individual ones, institutional ownership provides an effective monitoring role, including financial reporting monitoring (Man & Wong, 2013). It helps to watch over and control earnings management behaviour.Second, government shareholders can own firm shares, which refers to governmental ownership. Governmental ownership is related to share ownership either by national or local government. Cheng et al. (2015) explain that government-owned firms have worse monitoring functions than non-government ones. Government shareholders provide solid political connections instead of professional business management. A political connection can be used to make irrelevant decision-making, such as low-quality auditor selection (Khelil et al, 2022) making loans with politically connected banks (Chen et al., 2010), or low-quality underwriter selection for an I.P.O. (Chen et al., 2013). The worse monitoring function can lead to higher earnings management engagement. Third, firm shares can be owned by founding family shareholders, which refers to family ownership. The founding family tends to increase earnings quality for a higher reputation for the next family generation (Pratiwi & Aligarh, 2021). Family ownership provides a better monitoring role to watch over earnings management behaviour.

There are some inconsistent findings of ownership and earnings management behaviour. Some previous studies find that institutional (Guo & Ma, 2015), governmental (Cheng et al., 2015) and family (Wang, 2006) ownerships decrease the level of earnings management. Others find that institutional (Lin & Manowan, 2012), governmental (Guo & Ma, 2015), and family (Amir et al., 2018; Eng et al., 2019) ownerships increase earnings management. Further, Capalbo et al. (2014) do not find any significant relationship between government ownership and earnings management.

Since earnings management can be either opportunistic or informative, previous inconsistent findings could come from uncategorized earnings management behaviour. An effective monitoring role only allows managers to engage in earnings management for informative earnings management to improve earnings information quality. Informative earnings management improves earnings ability to reflect future cash flow, revenue, and dividend (Subramanyam, 1996). The investor also gives positive responses to informative earnings management (Siregar & Utama, 2009; Subramanyam, 1996) because it can be used as a signalling tool (Simamora, 2018) and help investors predict future performance (Gunny, 2010). Oppositely, opportunist earnings management hides poor performance (Cohen et al., 2011). Institution and family shareholders have better monitoring roles, making them more likely to increase informative earnings management than opportunists. On the other hand, government shareholders have a worse monitoring role and lead managers to engage more in opportunist earnings management than an informative one. As one of the good corporate governance aspects, the monitoring function can reduce information asymmetry (Lin et al., 2016) by increasing informative earnings management.

Literature Review

Agency Theory and Opportunist Earnings Management

Earnings management can be seen from an agency theory perspective. The asymmetry of information could trigger earnings management. Asymmetry information comes from a conflict of interests between shareholders and managers (Jensen & Meckling, 1976). When a conflict of interests exists, earnings management becomes an opportunist act engaged by managers to fulfil their utility. From an opportunist perspective, earnings management can be used for earnings-based compensation motivation, such as beating the earnings target (Cohen et al., 2011), fulfilling analyst pressure (Irani & Oesch, 2016), or firm share offering to the market (Kothari et al., 2016). Nuryaman (2013) stated that investors respond negatively to opportunist earnings management as bad news.

Signalling Theory and Informative Earnings Management

The signalling theory explanation is also based on information asymmetry condition. Unlike the agency theory perspective, signalling theory sees information asymmetry as motivating firms to share private information (Connelly et al., 2011). The private information sharing objective is to give a signal about firm quality (Kirmani & Rao, 2000), such as information on debt or dividend (Bisogno & Donatella, 2022). When earnings management is done based on a signalling perspective, it becomes informative earnings management. Informative earnings management can be used as signalling of a firm ability to achieve performance. It can reflect financial ability and value (Subramanyam, 1996), reduce performance prediction uncertainty (Liu, 2016), or predict future performance (Gunny, 2010; Liu, 2016).

Hypotheses Development

Institutional Ownership

Since information asymmetry arrived from the information gap between shareholders and managers, the shareholder's monitoring role must be examined, primarily related to earnings management. Man and Wong (2013) explain that institutional shareholders have the better business knowledge and more power to intervene in management policy with poor results than individual shareholders. Institutional shareholders also have more extensive resources to perform research related to firm business. With their knowledge, power, and resource, institutional shareholders perform a better monitoring role. They can make a difference between an opportunist and informative earnings management. finds that institutional ownership can reduce opportunist earnings management.

H1: Institutional ownership increase informative earnings management.

Governmental Ownership

Government shareholders have a less effective monitoring role than private shareholders (Cheng et al., 2015). It comes from unprofessional management and political interest (Fan et al., 2007). Some studies find government firms likelier to choose lower quality auditors (Wang et al., 2008) and underwriters for stock market funding (Chen et al., 2013). Bad governance by government shareholders will increase opportunist earnings management. Information asymmetry in government-owned firms is also higher (Choi et al., 2010). It leads to lower informative earnings management.

H2: Governmental ownership decrease informative earnings management.

Family Ownership

There are some characteristics of family shareholders. First, family shareholders maintain a high firm reputation (Hall & Nordqvist, 2008). Family-owned firms always depend on their reputation to make business relationships with other stakeholders (Nurjanah & Aligarh, 2021). Second, family shareholders have bonded emotionally and historically with the firm since it was founded. It makes them maintain the firm to avoid controversial problems such as opportunist earnings management. Third, family shareholders provide long-term monitoring to continue the firm to the next family generation (Wang, 2008). Santoso and Rakhman (2013) and Dwiyanti and Astriena (2018) find that family ownership improves firm monitoring roles. Wang (2006) also find that family firms increase earnings quality. Demsetz and Lehn (1985) find that family firms promote lower information asymmetry. Characteristics of family shareholders will reduce opportunist earnings management and increase information.

H3: Family ownership increase informative earnings management.

METHOD

The research samples are manufacturing firms listed on the Indonesian Stock Exchange from 2013-2017. Manufacture firms have a longer business chain, leading to earnings uncertainty (Ahmed & Azim, 2015). Manufacturing firms are more likely to engage in earnings management than other firms. Table 1 shows the sample selection.

Table 1. Sample

	Firm	Firm-Year
Manufacturing firms listed in Indonesian Stock Exchange 2013-2017	128	640
Incomplete data	2	(10)
Change financial reporting period	3	(15)
Total	**123**	**615**

Operational variables

The dependent variable is earnings management. Earnings management is measured by discretionary accrual. Accounting policy and estimation is commonly used by managers to managed earnings (Lin et al., 2016). Discretionary accrual measured by modified Jones model (Dechow et al., 1995).

$$Total\ Accrual_t = Net\ income\ after\ tax_t - Operation\ cash\ flow_t \ \ldots\ldots(1)$$

$$\frac{Total\ Accrual_t}{Assets_{t-1}} = \beta_0 + \beta_1 \frac{1}{Assets_{t-1}} + \beta_2 \frac{\Delta Sales_t}{Assets_{t-1}} + \beta_2 \frac{Fixed\ Assets_t}{Assets_{t-1}} + e \ \ldots\ldots(2)$$

$$Non\ Discretionary\ Accrual_t = \widehat{\beta_0} + \widehat{\beta_1} \frac{1}{Assets_{t-1}} + \widehat{\beta_2} \frac{\Delta Sales_t - \Delta Receivable_t}{Assets_{t-1}} + \widehat{\beta_2} \frac{Fixed\ Assets_t}{Assets_{t-1}} \ \ldots(3)$$

$$Discretionary\ Accrual_t = \frac{Total\ Accrual_t}{Assets_{t-1}} - NDAC_t \ \ldots\ldots(4)$$

Earnings management is split into informative and opportunist earnings management based on earnings growth (Lin et al., 2016). Earnings growth is occurred by the differences between current earnings and previous earnings. The category of earnings management can be seen in Table 2.

Table 2. Category of Earnings Management

	Discretionary Accruals (+)	Discretionary Accruals (-)
Earnings Growth (+)	Informative	Opportunist
Earnings Growth (-)	Opportunist	Informative

If positive discretionary accrual followed by positive earnings growth or negative discretionary accrual followed by negative earnings growth is positive, it occurs as informative earnings management. If positive discretionary accrual followed by negative earnings growth is positive, or negative discretionary accrual followed by positive earnings growth is positive, it occurs as opportunist earnings management. A dummy variable measures the earnings management category—1 for informative and 0 for opportunist earnings management (Lin et al., 2016).

Independent variables are institutional ownership (a portion of the share held by the institution), governmental ownership (a portion of the share held by national and local government), and family ownership (a portion of the share held by founders and/or their families). Control variables are firm size, auditor quality, and leverage. Firm size and leverage control the earnings management motivation related to political cost and debt covenant motivations, while auditor quality controls the earnings management cost to determine opportunist and informative earnings management (Simamora, 2019). The logarithm of total assets measures the firm size. Auditor quality is measured by a dummy variable, a score of 1 for big four auditors and 0 for non-big Four auditors. The total debt measures leverage to total assets ratio.

Analysis Model

The hypotheses test uses a logistic regression test. The regression model can be seen in Equation 5.

$$Logistics\ (IEM) = Ln\frac{IEM}{1-IEM} = a + b_1INS + b_2GOV + b_3FAM + b_4SIZE + b_5AUDIT + b_6LEV + e \quad (5)$$

Notes:
IEM : Informative earnings management,
INS : Institutional ownership,
GOV : Governmental ownership,
FAM : Family ownership,
SIZE : Firm size,
AUDIT : Auditor quality,
LEV : Leverage.

RESULTS AND DISCUSSION

Results

Descriptive Statistics

Table 3 shows that 286 samples engaged in opportunist earnings management, or 46.5% of the total sample. Are 329 samples engaged in informative earnings management, or 53.5% of the total sample? The average institutional ownership for the opportunist earnings management sample is 0.6036, lower than that of the informative earnings management sample with average institutional ownership of 0.6386.

Table 3. Descriptive Statistics

Earnings Management		INS	GOV	FAM	SIZE	LEV	AUDITOR	
							Big 4	Non-Big 4
Oportunist	Sample	286	286	286	286	286	105	181
	% of Total	46.50 %	46.50 %	46.50 %	46.50%	46.50%		
	Mean	0.6036	0.0288	0.0624	12.2816	0.6602		

Earnings Management		INS	GOV	FAM	SIZE	LEV	AUDITOR	
							Big 4	Non-Big 4
	Std. Deviation	0.2683	0.1402	0.1577	0.7071	0.7793		
Informative	Sample	329	329	329	329	329	163	166
	% of Total	53.50 %	53.50 %	53.50 %	53.50%	53.50%		
	Mean	0.6386	0.0244	0.0732	12.348 2	0.5074		
	Std. Deviation	0.2582	0.1357	0.1925	0.6987	0.2878		
Total	Sample	615	615	615	615	615	347	286
	% of Total	100%	100%	100%	100%	100%		
	Mean	0.6223	0.0264	0.0682	12.317 2	0.5784		
	Std. Deviation	0.2633	0.1377	0.1771	0.7026	0.5761		

As expected, firms with higher institutional ownership are more likely to engage in informative earnings management than opportunist ones. The average governmental ownership for the opportunist earnings management sample is 0.0288, higher than the informative earnings management sample with average governmental ownership of 0.0244. As expected, firms with higher governmental ownership are more likely to engage in opportunist earnings management than informative ones. The average family ownership for the opportunist earnings management sample is 0.0624, lower than the informative earnings management sample with average institutional ownership of 0.0723. As expected, firms with higher family ownership are more likely to engage in informative earnings management than opportunist ones.

Preliminary Test

Table 4 shows that -2LogL reduction is 26.339 (significant in 0.01), indicating that the model fits the data. Hosmer and Lemeshow's significance value is 0.199 (insignificant), indicating that the model is suitable for observed data. Nagelkerke R Square value is 0,056, which shows that 5.6% of earnings management can be explained by institutional ownership, govern 94.4% of earnings management is explained by other variables. The classification matrix shows that model can predict the probability of earnings management is around 57.1 %.

Table 4. Preliminary Test

Test	**Result**
Overall fit	-2LogL reduction = 26.339*
Goodness of fit	Significance value of Hosmer and Lemeshow = 0.199**
Nagelkerke R Square	Nagelkerke R Square value = 0.056
Classification matrix	Overall Percentage Correct is 57.1%

*Significant in 0.01, **Insignificant

Hypotheses Testing

Table 5 shows that institutional ownership has a coefficient of 1.251 (significant in 0.01). Institutional ownership increases informative earnings management. Governmental ownership has a coefficient value of 0.878 (insignificant). Governmental ownership increases do not affect earnings management. Family ownership has a coefficient value of 1.397 (significant in 0.05). Family ownership increases informative earnings management.

Table 5. Hypotheses Test

Variable	Coefficient	Notes
Institutional Ownership	1.251*	H1 is accepted
Governmental Ownership	0.878	H2 is rejected
Family Ownership	1.397**	H3 is accepted
Size	0.031	
Auditor Quality	0.382**	
Leverage	-0.497*	
Constant	-1.025	
Dependent Variable	1 = Informative Earnings Management	
	0 = Opportunist Earnings Management	
*Significant in 0.01, **Significant in 0.05		

Discussion

The empirical findings indicate a significant positive relationship between institutional ownership and informative earnings management, supporting the argument put forth by Man and Wong (2013) that institutional shareholders possess effective monitoring capabilities, which contribute to the reduction of opportunistic earnings management and the promotion of informative earnings management. Institutional investors devote more resources and time to conduct extensive research on companies and industries compared to individual shareholders, who typically have limited capacity for such oversight (Man and Wong, 2013). Additionally, the presence of influential institutional shareholders can exert pressure on companies to improve performance in cases of subpar financial results (Man and Wong, 2013). Institutional ownership increases informative earnings management. The result is consistent with Guo and Ma (2015) finding that institutional ownership has a better monitoring role in reducing opportunist earnings management. Institution shareholders have better business knowledge than individual shareholders. It helps institutional shareholders separate earnings management into informative or opportunist ones. The enhanced monitoring effectiveness of institutional shareholders can be attributed to their superior knowledge and understanding of business and industry dynamics. This knowledge advantage enables institutional investors to scrutinize management behavior, differentiating between opportunistic earnings management driven by self-interest and informative earnings management aimed at conveying private information about the company's performance.

On the other hand, the results of the hypothesis test reveal an insignificant relationship between government ownership and informative earnings management. This finding contradicts the assertions made by Cheng et al. (2015) and Fan et al. (2007), which suggest that government ownership leads to lower monitoring capabilities, thereby fostering managerial opportunism. However, these findings align with the research conducted by Capalbo et al. (2014), which failed to establish a significant association between government ownership and earnings management practices. The lack of impact from government ownership on informative earnings management can be attributed to the differing priorities of government-owned companies, which are not primarily focused on managing earnings, whether informatively or opportunistically. Incentives for government-owned entities to engage in earnings management are comparatively weaker than those for private companies (Cheng et al., 2015). Conflicts of interest between managers and government shareholders primarily revolve around political and social considerations rather than using earnings as a performance metric (Chen et al., 2011). Managerial compensation is likewise based on political and social performance rather than business indicators such as earnings (Cheng et al., 2015). Government-owned firms also rely less on earnings information for obtaining funding, instead leveraging political connections with financial institutions such as banks and capital markets (Amir et al., 2018). The reduced emphasis on earnings by government shareholders contributes to the absence of a discernible relationship between government ownership and both informative and opportunistic earnings management. Governmental ownership does not affect earnings management. The result differs from Fan et al. (2007) finding that government-owned firms tend to engage in opportunist earnings management. On the other hand, the same result found by Capalbo et al. (2014) shows no relationship between government ownership and earnings management. Government-owned firms have no incentive to engage in opportunist and informative earnings management because manager performance is not evaluated by earnings but by political and social aspects (Chen et al., 2011; Cheng et al., 2015).

Furthermore, the empirical findings demonstrate a significant positive association between family ownership and informative earnings management. This outcome aligns with the explanation provided by Wang (2006), suggesting that family shareholders contribute to the improvement of earnings information quality through enhancing informative earnings management practices. Family shareholders actively enhance informative earnings management to ensure the preservation of the company's reputation (Hall and Nordqvist, 2008), mitigate information asymmetry (Demsetz and Lehn, 1985), and secure the long-term sustainability of the firm for future generations (Wang, 2006). Motivated by these factors, family shareholders engage in effective oversight, encouraging managerial behavior that emphasizes efficient contracting and the transmission of reliable information. Family ownership increases informative earnings management. The result is consistent with Wang (2006), who finds that family firms have high earnings. One of the ways to increase earnings quality is by engaging informative earnings management. Family shareholders have an effective monitoring role because they are motivated more to maintain a high firm reputation, prepare a sustainable firm to give it to the next generation and provide lower information asymmetry.

CONCLUSION

This research objective is to examine the effect of ownership on earnings management. The result shows that institutional and family ownership increase informative earnings management. It indicates that institution and family shareholders perform better monitoring roles to watch over managers who engage in informative earnings management than opportunist ones. On the other hand, governmental ownership has no effect on earnings management. It indicates that government shareholders are less interested in earnings to evaluate managers' performance and more interested in political and social aspects. This study provides a theoretical contribution, specifically by extending the existing literature on earnings management through the introduction of a categorization framework that distinguishes between informative and opportunistic acts.

This study has identified several limitations that can provide valuable insights for future research. Firstly, it is important to note that the study focused solely on direct share ownership and did not account for indirect ownership due to data accessibility constraints. Future research should consider incorporating measures of indirect ownership to obtain a more comprehensive understanding of the effects of ownership on informative earnings management. Secondly, the study utilized a comparison between discretionary accruals and earnings growth to determine informative earnings management as a signaling mechanism. However, it did not establish a direct link between informative earnings management practices and earnings forecasts generated by companies and stock analysts. Considering that earnings forecasts can also serve as important signals to shareholders, it would be beneficial for future studies to explore the relationship between informative earnings management and earnings forecasts, taking into account perspectives from both companies and stock analysts. Despite these limitations, the findings of this study provide a foundation for further research. Future studies should consider the inclusion of indirect ownership in their analyses, recognizing the potential influence of shareholders who exert monitoring roles through indirect ownership structures. Additionally, incorporating earnings forecasts as signals to shareholders and examining their association with informative earnings management can contribute to a more comprehensive understanding of the relationship between share ownership and earnings management. By acknowledging these limitations and addressing them in future research endeavors, scholars can delve deeper into the complexities of share ownership and its implications for informative earnings management.

References

Ahmad, G., Hayat, F., Almaqtari, F. A., Farhan, N. H., & Shahid, M. (2023). Corporate social responsibility spending and earnings management: The moderating effect of ownership structure. *Journal of Cleaner Production, 384*, 135556. https://doi.org/10.1016/j.jclepro.2022.135556

Ahmed, H. & Azim, M. (2015). Earnings Management Behavior: A Study on the Cement Industry of Bangladesh. *International Journal of Management, Accounting and Economics*, *2*(4), 265–276. https://www.ijmae.com/article_115478.html

Amir, A. S. A. B., Shaari, H. B. & Ariff, A. H. B. M. (2018). Family Ownership and Real Earnings Management. *Journal of Global Business and Social Entrepreneurship*, *4*(11), 9–16. https://myjurnal.mohe.gov.my/public/article-view.php?id=129098

Athamena, B., Houhamdi, Z., & ElRefae, G. A. (2023). Retention contracts with asymmetric information: optimistic approach vs pessimistic approach. *Journal of Financial Reporting and Accounting, 21*(1), 156-177. https://doi.org/10.1108/JFRA-12-2021-0488

Avabruth, S. M., & Padhi, S. K. (2023). Earnings management by family firms to meet the debt covenants: evidence from India. J*ournal of Accounting in Emerging Economies, 13*(1), 93-117. https://doi.org/10.1108/JAEE-12-2020-0331

Bao, S. R., & Lewellyn, K. B. (2017). Ownership structure and earnings management in emerging markets—An institutionalized agency perspective. *International Business Review*, *26*(5), 828-838. https://doi.org/10.1016/j.ibusrev.2017.02.002

Bisogno, M., & Donatella, P. (2022). Earnings management in public-sector organizations: a structured literature review. *Journal of Public Budgeting, Accounting & Financial Management, 34*(6), 1-25. https://doi.org/10.1108/JPBAFM-03-2021-0035

Capalbo, F., Frino, A., Mollica, V. & Palumbo, R. (2014). Accrual-Based Earnings Management in State Owned Companies: Implications for transnational accounting regulation. *Accounting, Auditing & Accountability Journal*, *27*(6), 1026–1040. https://doi.org/10.1108/AAAJ-06-2014-1744

Chen, C., Shi, H. & Xu, H. (2013). Underwriter Reputation, Issuer Ownership, and Pre-IPO Earnings Management: Evidence from China. *Financial Management*, 42(3), 647–677. https://www.jstor.org/stable/43280508

Chen, H., Chen, J. Z., Lobo, G. J. & Wang, Y. (2010). Association Between Borrower and Lender State Ownership and Accounting Conservatism. *Journal of Accounting Research*, *48*(5), 973–1014. https://www.jstor.org/stable/40929535

Chen, H., Chen, J. Z., Lobo, G. J. & Wang, Y. (2011). Effects of Audit Quality on Earnings Management and Cost of Equity Capital: Evidence from China. *Contemporary Accounting Research*, *28*(3), 892–925. https://doi.org/10.1111/j.1911-3846.2011.01088.x

Chen, X., Li, W., Chen, Z., & Huang, J. (2022). Environmental regulation and real earnings management—Evidence from the SO2 emissions trading system in China. *Finance Research Letters*, *46*, 102418. https://doi.org/10.1016/j.frl.2021.102418

Cheng, C. S. A., Wang, J. & Wei, S. X. (2015). State Ownership and Earnings Management around Initial Public Offerings: Evidence from China. *Journal of International Accounting Research*, *14*(2), 89–116. https://dx.doi.org/10.2139/ssrn.1985507

Choi, J. J., Sami, H. & Zhou, H. (2010). The Impacts of State Ownership on Information Asymmetry: Evidence from an Emerging Market. *China Journal of Accounting Research*, 3, 13–50. https://doi.org/10.1016/S1755-3091(13)60018-0

Cohen, D. A., Darrough, M. N., Huang, R. & Zach, T. (2011). Warranty Reserve: Contingent Liability, Information Signal, or Earnings Management Tool?. *The Accounting Review*, 86(2), 569–604. https://www.jstor.org/stable/29780246

Connelly, B. L., Certo, S. T., Ireland, R. D. & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*, *3*(1), 39–67. https://doi.org/10.1177/0149206310388419

Dechow, P. M., Sloan, R. G. & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review*, *70*(2), 193–225. https://www.jstor.org/stable/248303

Demsetz, H. & Lehn, K. (1985). The Structure of Corporate Ownership: Causes and Consequences. *Journal of Political Economy*. *93*(6), 1155–1177. https://www.jstor.org/stable/1833178

Dwiyanti, K. T. & Astriena, M. (2018). Pengaruh Kepemilikan Keluarga dan Karakteristik Komite Audit terhadap Manajemen Laba. *Jurnal Riset Akuntansi Dan Bisnis Airlangga*, *3*(2), 447–469. https://doi.org/10.31093/jraba.v3i2.123

Ehsan, S., Tariq, A., Nazir, M. S., Shabbir, M. S., Shabbir, R., Lopez, L. B., & Ullah, W. (2022). Nexus between corporate social responsibility and earnings management: Sustainable or opportunistic. *Managerial and Decision Economics*, *43*(2), 478-495. https://doi.org/10.1002/mde.3396

Eng, L. L., Fang, H., Tian, X., Yu, T. R. & Zhang, H. (2019). Financial Crisis and Real Earnings Management in Family Firms: A Comparison between China and the United States. *Journal of International Financial Markets, Institutions and Money*, *59*. 184–201. https://doi.org/10.1016/j.intfin.2018.12.008

Fan, J. P. H., Wong, T. J. & Zhang, T. (2007). Politically Connected CEOs, Corporate Governance, and Post-IPO Performance of China's newly Partially Privatized Firms. *Journal of Financial Economics*, *84*(2), 330–357. https://doi.org/10.1016/j.jfineco.2006.03.008

Gim, J., & Jang, S. (2023). Dividend and investment decisions in asymmetric information environments: evidence from the restaurant industry. I*nternational Journal of Contemporary Hospitality Management*, *35*(5), 1779-1801. https://doi.org/10.1108/IJCHM-01-2022-0087

Gunny, K. A. (2010). The Relation Between Earnings Management Using Real Activities Manipulation and Future Performance: Evidence from Meeting Earnings Benchmarks", *Contemporary Accounting Research*, *27*(3), 855–888. https://doi.org/10.1111/j.1911-3846.2010.01029.x

Guo, F. & Ma, S. (2015). Ownership Characteristics and Earnings Management in China. *The Chinese Economy*, *48*(5), 372–395. https://ro.uow.edu.au/buspapers/789/

Hall, A. & Nordqvist, M. (2008). Professional Management in Family Businesses: Toward an Extended Understanding. *Family Business Review*, *21*(1), 51–69. https://doi.org/10.1111/j.1741-6248.2007.00109.x

Irani, R. M. & Oesch, D. (2016). Analyst Coverage and Real Earnings Management: Quasi-Experimental Evidence. *Journal of Financial and Quantitative Analysis*, *51*(2), 589–627. https://www.jstor.org/stable/43862328

Jensen, M. C. & Meckling, W. H. (1976). Theory of The Firm: Managerial Behaviour, Agency Cost and Ownership Structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Khelil, I., Khlif, H., & Amara, I. (2022). Political connections, political corruption and auditing: a literature review. *Journal of Financial Crime*, *29*(1), 159-170. https://doi.org/10.1108/JFC-12-2020-0257

Kirmani, A. & Rao, A. R. (2000). No pain, no gain: A critical review of the literature on signaling unobservable product quality. *Journal of Marketing*, *64*(2), 66–79. https://www.jstor.org/stable/3203443

Kothari, S. P., Mizik, N. & Roychowdhury, S. (2016). Managing for the Moment: The Role of Earnings Management via Real Activities versus Accruals in SEO Valuation. *The Accounting Review*, *91*(2), 559–586. https://www.jstor.org/stable/43867623

Kumala, R., & Siregar, S. V. (2021). Corporate social responsibility, family ownership and earnings management: the case of Indonesia. *Social Responsibility Journal*, *17*(1), 69-86. https://doi.org/10.1108/SRJ-09-2016-0156

Le, B., & Moore, P. H. (2023). The impact of audit quality on earnings management and cost of equity capital: Evidence from a developing market. *Journal of Financial Reporting and Accounting*, *21*(3), 695-728. https://doi.org/10.1108/JFRA-09-2021-0284

Lemma, T. T., Negash, M., Mlilo, M., & Lulseged, A. (2018). Institutional ownership, product market competition, and earnings management: Some evidence from international data. *Journal of*

Business Research, *90*, 151-163. https://doi.org/10.1016/j.jbusres.2018.04.035

Lin, L. & Manowan, P. (2012). Institutional Ownership Composition and Earnings Management. *Review of Pacific Basin Financial Markets and Policies*, *15*(4), 1–22. https://doi.org/10.1142/S0219091512500221

Lin, Z., Liu, M. & Noronha, C. (2016). The Impact of Corporate Governance on Informative Earnings Management in the Chinese Market. *ABACUS: A Journal of Accounting, Finance and Business Studies*, *52*()3, 568–609. https://doi.org/10.1111/abac.12084

Liu, Z. J. (2016). Effect of earnings management on economic value added: A cross-country study. *South African Journal of Business Management*, *471*(1), 29–36. http://dx.doi.org/10.4102/sajems.v20i1.1247

Man, C. & Wong, B. (2013). Corporate Governance and Earnings Management: A Survey Of Literature. *The Journal of Applied Business Research*, *29*(2), 391–418. https://doi.org/10.19030/jabr.v29i2.7646

Mensah, E., & Boachie, C. (2023). Corporate governance mechanisms and earnings management: The moderating role of female directors. *Cogent Business & Management*, *10*(1), 2167290. https://doi.org/10.1080/23311975.2023.2167290

Nurjanah, S., & Aligarh, F. (2021). Family Ownership, Independent Commissioners, Audit Quality, And Tax Avoidance In Indonesia. *JIFA (Journal of Islamic Finance and Accounting)*, *4*(2), 82-93. https://doi.org/10.22515/jifa.v4i2.4378

Nuryaman. (2013). The Influence of Earnings Management on Stock Return and the Role of Audit Quality as a Moderating Variable. *International Journal of Trade, Economics and Finance*, *4*(2), 73–78. https://doi.org/10.7763/IJTEF.2013.V4.263

Pratiwi, H. R., & Aligarh, F. (2021). Pengaruh koneksi politik, kepemilikan keluarga, ukuran perusahaan, dan profitabilitas terhadap nilai perusahaan. *JAPP: Jurnal Akuntansi, Perpajakan, Dan Portofolio*, *1*(1), 12-22. http://dx.doi.org/10.2426/10.24269

Rahman, M. J., Ding, J., Hossain, M. M., & Khan, E. A. (2023). COVID-19 and earnings management: a comparison between Chinese family and non-family enterprises. Journal of Family Business Management, *13*(2), 229-246. https://doi.org/10.1108/JFBM-01-2022-0011

Rahman, M. J., & Zheng, X. (2023). Whether family ownership affects the relationship between CSR and EM: evidence from Chinese listed firms. Journal of Family Business Management, *13*(2), 373-386. https://doi.org/10.1108/JFBM-03-2022-0030

Ramalingegowda, S., Utke, S., & Yu, Y. (2021). Common institutional ownership and earnings management. *Contemporary Accounting Research*, *38*(1), 208-241. https://doi.org/10.1111/1911-3846.12628

Santoso, R. D. & Rakhman, F. (2013). CEO Characteristics and Earnings Management. *The Indonesian Journal of Accounting Research*, *16*(3), 181–196. http://doi.org/10.33312/ijar.276

Scott, W.R. (2014), *Financial Accounting Theory*, 7th ed., Prentice Hall, New Jersey, USA.

Shang, Y., & Chi, Y. (2023). Corporate Environmental Information Disclosure and Earnings Management in China: Ethical Behaviour or Opportunism Motivation?. *Sustainability*, *15*(11), 8896. https://doi.org/10.3390/su15118896

Simamora, A. J. (2018). Effect of Earning Management on Earnings Predictability in Information Signaling Perspective. *Jurnal Akuntansi*, 22(2), 173–191. https://doi.org/10.24912/ja.v22i2.346

Simamora, A. J. (2019). Earnings Management and Future Earnings. *Jurnal Akuntansi Dan Keuangan Indonesia*, *16*(2), 20–43. https://doi.org/10.21002/jaki.2019.08

Siregar, S. V & Utama, S. (2009). 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

Subramanyam, K. R. (1996). The pricing of discretionary accruals. *Journal of Accounting and Economics*, *22*(1), 249–281. https://doi.org/10.1016/S0165-4101(96)00434-X

Wang, D. (2006). Founding Family Ownership and Earnings Quality. *Journal of Accounting Research*, *44*(3), 619–656. https://doi.org/10.1111/j.1475-679X.2006.00213.x

Wang, Q., Wong, T. J. & Xia, L. (2008). State Ownership, the Institutional Environment, and Auditor Choice: Evidence from China. *Journal of Accounting and Economics*, *46*(1), 112–134. https://doi.org/10.1016/j.jacceco.2008.04.001

Wan Mohammad, W. M., & Wasiuzzaman, S. (2020). Effect of audit committee independence, board ethnicity and family ownership on earnings management in Malaysia. *Journal of Accounting in Emerging Economies*, *10*(1), 74-99. https://doi.org/10.1108/JAEE-01-2019-0001

Xie, X., Chang, Y. S., & Shiue, M. J. (2022). Corporate life cycle, family firms, and earnings management: evidence from Taiwan. *Advances in accounting*, *56*, 100579. https://doi.org/10.1016/j.adiac.2021.100579

Zheng, S., Zhang, X., & Wang, H. (2023). Green credit policy and the stock price synchronicity of heavily polluting enterprises. *Economic Analysis and Policy*, *77*, 251-264. https://doi.org/10.1016/j.eap.2022.11.011