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Corporate governance and earnings management: The influence of female directors

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Abstract

This study investigates the effect of corporate governance on earnings management in Indonesian consumer non-cyclicals sector firms, and examines whether female board representation moderates this relationship. Grounded in agency theory, the research employs a quantitative panel data approach using 440 firm-year observations from 2019 to 2023. Earnings management is measured using the Modified Jones Model, while corporate governance is proxied through a composite factor derived from board size, independence, meeting frequency, and managerial ownership via factor analysis. The study applies moderated regression analysis to test the hypotheses. The findings show that strong corporate governance significantly reduces earnings management, supporting prior research in both developed and emerging markets. However, the presence of female directors does not significantly moderate this relationship. These results suggest that while board diversity is symbolically important, its practical impact on governance outcomes in emerging markets may be limited by institutional and cultural factors. The contribution of this research is to provide Indonesia-specific evidence on corporate governance. In addition, it also underscores the urgency of inclusive governance reform where it will impact the empowerment of female directors in a tangible way, rather than just representation.

Keywords: Corporate Governance; Earnings Management; Female Directors; Indonesia; Agency Theory

1. Introduction

Earnings management has long been a central concern in financial reporting, particularly as companies seek to meet stakeholder expectations, secure financing, and optimize managerial compensation [1, 2]. Despite the implementation of accrual-based accounting standards and strengthened disclosure frameworks, managers still find room to engage in discretionary practices that distort the true performance of firms. This is especially evident in emerging markets, where corporate governance structures are still evolving and enforcement mechanisms may be relatively weak [3]. In Indonesia, high-profile cases such as PT Tiga Pilar Sejahtera have revealed significant earnings management practices, highlighting the need for stronger monitoring mechanisms [4]. Corporate governance mechanisms such as board independence, board size, board meetings, and managerial ownership are widely recognized as critical tools to curb earnings management [5]. However, empirical findings on the effectiveness of these mechanisms remain mixed. Some studies suggest a negative relationship between strong governance and earnings management [6, 7], while others report either insignificant or even positive effects [8, 9]. This inconsistency suggests a potential moderating influence from other variables, such as gender diversity in corporate leadership.

One growing area of interest is the role of female directors in enhancing board oversight. Prior research indicates that women in leadership tend to adopt more conservative financial reporting practices and exhibit higher ethical sensitivity and risk aversion, which may reduce managerial opportunism [10, 11]. Studies such as those by Gull [12] and Zalata [13] support the view that gender-diverse boards are associated with lower levels of earnings management. However, there remains a significant research gap: few studies have empirically tested the moderating effect of female directors on the relationship between corporate governance mechanisms and earnings management, particularly in emerging

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markets such as Indonesia. Most prior research has either examined gender diversity in isolation or conducted studies in mature economies, leading to a lack of contextual insights in developing regions [3], [14].

As a way of addressing this gap, here will examine how corporate governance mechanisms affect earnings management in non-cyclical consumer sector firms in Indonesia, with female board representation as a moderating variable. This sector was chosen because of its strategic economic advantage and relatively high financial stability across the business cycle. This makes it an appropriate topic to examine governance issues. The research uses a quantitative panel data approach on listed firms from 2019–2023, covering the pre, during, and post-COVID-19 periods, which allows for a more comprehensive assessment across varying economic conditions.

The novelty of this study lies in its focus on (1) a single corporate governance derived from factor analysis for precision, (2) the inclusion of a gender-diversity moderator, and (3) the specific focus on Indonesia's consumer non-cyclicals sector, which has been underexplored in the governance literature. Furthermore, this research captures dynamic changes in governance behavior and financial reporting before and after the pandemic crisis, contributing to the growing discourse on post-crisis governance effectiveness.

From a theoretical perspective, this research extends agency theory by testing how gender-based behavioral characteristics interact with governance structures to mitigate agency conflicts and earnings management. From a practical standpoint, the findings are expected to inform regulators, investors, and policymakers on the importance of promoting gender diversity and strengthening corporate governance to ensure the integrity of financial reports in developing economies.

2. Material and methods

2.1. Literature Review

Agency theory explains the relationship between principals and agents, which is often marked by conflicting interests due to differing goals. Managers (agents), who possess greater access to internal information, may act opportunistically by engaging in earnings management to serve personal interests. This behavior stems from information asymmetry and self-interest, as highlighted by Eisenhardt [15]. Effective corporate governance mechanisms, such as independent board oversight, audit committees, and financial transparency, are essential to align interests and reduce the likelihood of financial manipulation [16, 17].

Corporate governance serves as a key mechanism to align managerial actions with shareholder interests and reduce agency problems [18, 19]. Strong governance structures such as independent boards, regular meetings, and managerial ownership are believed to deter earnings management by increasing oversight and transparency [5, 20]. Earnings management, the strategic management of financial reporting, undermines the reliability of financial statements [21]. While many studies reports that effective corporate governance reduces such practices [6, 22], other findings are mixed or context-dependent [8, 23].

H_1: Corporate governance negatively affect earnings management

Board gender diversity is increasingly recognized for enhancing governance quality. Female directors are often more risk-averse, ethical, and attentive to stakeholder concerns traits that can improve monitoring and reduce earnings management [11]. Several studies find that female board presence is negatively associated with earnings management [10, 13, 24]. Moreover, recent work shows that women on boards can strengthen the effectiveness of governance mechanisms [3]. However, other studies report neutral or even positive associations, indicating that the influence of female directors may vary by context [14, 25]. This suggests a research gap, especially in emerging markets like Indonesia, where gender diversity is still evolving.

H_2: Female directors strengthen the negative relationship between corporate governance and earnings management.

2.2. Method

This study adopts a quantitative explanatory research design using a panel data regression model to examine the influence of corporate governance on earnings management, with female directors serving as a moderating variable. The panel data structure enables the study to capture both cross-sectional and time-series variations across firms and over the 2019–2023 period. This approach is consistent with prior research on governance and earnings management in emerging market contexts

The study focuses on companies in the consumer non-cyclicals sector listed on the Indonesia Stock Exchange (IDX). The sample was selected using purposive sampling based on the following inclusion criteria: (1) firms that consistently published audited annual reports during the observation period; (2) financial statements reported in Indonesian Rupiah; and (3) complete disclosures of board characteristics and financial data. Firms that underwent mergers, acquisitions, or delistings during the period were excluded. Data were collected from publicly available sources, including the IDX website and company annual reports. The final dataset comprises 440 firm-year observations from approximately 125 firms, after excluding incomplete and outlier cases.

Earnings management is the dependent variable in this study, while corporate governance is measured using four indicators: board independence, board meetings, board size, and managerial ownership concentration. These indicators are processed using principal component analysis (PCA) to identify a representative governance construct. Female directors are examined as a moderating variable to assess whether gender diversity on the board influences the relationship between governance and earnings management.

Table 1 Measurement of Variables

No	Variable	Indicator	Formula	Source
1	Earnings Management (Y)	Discretionary Accruals by Modified Jones Model (1995)	Total Accruals: $TA_{it} = (N_{it} - OCF_{it})$ Estimate Total Accruals: $TA_{it}/A_{it}\text{-}1 = \beta_1\ (1/A_{it-1}) + \beta_2\ ((\Delta REV_{it}\ /\ A_{it-1})) + \beta_3\ (PPE_{it}/A_{it-1}) + e$ Estimate NDA: $NDA_{it} = \beta_1\ (1/A_{it-1}) + \beta_2\ ((\Delta REV_{it} - \Delta REC_{it})/\ A_{it-1})) + \beta_3\ (PPE_{it}/A_{it-1})$ $DAit = (TA_{it}\ /A_{it}\text{-}1) - NDA_{it}$	[26]
2	Corporate Governance (X)	Board Independence	Number of independent board members in firm *i* at year t	[3]
		Board Meetings	Number board of director meetings held by firm *i* in year t	[3]
		Board Size	Total number of boards members in firm *i* in year t	[3]
		Managerial Ownership Concentration	Managerial Ownership = (Shares owned by management) / (Total shares outstanding)	[23]
3	Moderating Variable (M)	Female Directors	Proportion of female board members to total board size in firm *i* at year t	[3]

3. Result

3.1. Descriptive Statistics

Table 2 presents the descriptive statistics for all variables used in this study. The average value of earnings management, measured using discretionary accruals, is 464.52 with a relatively high standard deviation of 825.08, indicating substantial variation in earnings management practices across firms. The proportion of independent directors on the board is 21%, although there is considerable variation across companies, indicating differences in the level of board independence. The frequency of board meetings averages 17 times per year, suggesting a relatively high level of monitoring activity. The average board size is between 4 to 5 members, with a maximum of 11 members, reflecting variations in board structure among firms. Meanwhile, managerial ownership remains relatively low, with an average of 6.79%, though it varies significantly across companies, implying that in many cases, managers do not hold substantial ownership stakes. The proportion of female directors averages 16.8%, reflecting the still-limited gender diversity on corporate boards in the Indonesian non-cyclical consumer sector.

Table 2 Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Earnings Management	464.52	825.08	10.915	5675.82
Board Independence	0.21	0.443	-	3
Board Meeting	17.30	8.726	-	105
Board Size	4.63	2.108	1	11
Managerial Ownership Concentration	0.679	0.170	0.000	0.807
Female Directors	0.168	0.194	0.000	0.750

3.2. Factor Analysis

Based on the factor analysis using Principal Component Analysis (PCA), the results show that among the four indicators of corporate governance, board size has the highest factor loading (.715), indicating that it is the most dominant variable representing the construct. Board meetings also show a moderate loading (.536), while board independence has a relatively weak loading (.145). Managerial ownership shows a strong negative loading (–.706), suggesting an inverse relationship with the underlying component. Therefore, board size was selected as the representative variable for corporate governance in further analysis.

Table 3 Principal Component Matrix[a] Analysis

Variable	Loading Factor Value
Board Independence	0.145
Board Meetings	0.536
Board Size	0.715
Managerial Ownership Concentration	-0.706
Extraction Method: Principal Component Analysis.	

a. 1 components extracted

3.3. Regression Results

To test the moderating role of female directors, moderated regression analysis (MRA) was conducted using interaction terms between corporate governance and female directors. The regression model is specified as:

$$Y = 2.930 - .151X - .239\ M + .028\ XM + e$$

Note:
Y = Earnings Management
X = Corporate Governance
M = Female Director
XM = Interaction of Corporate Governance and Female Director

Table 4 Moderated Regression Analysis Results

Variable	Coefficient (β)	Std. Error	t	Sig
(Constant)	2.930	0.91	32.378	0.000
Corporate Governance (X)	-0.151	0.019	-7.807	0.000
Female Directors (M)	0.239	0.226	-1.054	0.292
X × M Interaction	0.028	0.047	0.600	0.549
N	440			

3.4. Hypothesis Testing

H_1: *Corporate governance negatively affect earnings management*

In contrast, the main effect of corporate governance on earnings management is negative and highly significant (β = -.151, sig .000 < .05), confirming that stronger governance reduces the level of earnings management. H1 is accepted

H_2: *Female directors weaken the positive relationship between weak corporate governance and earnings management.*

The interaction term between corporate governance and female directors (X × M) yields a positive but statistically insignificant coefficient (β = .028, sig .292 > .05). Thus, the moderating effect of female directors on the relationship between corporate governance and earnings management is not supported. Consequently, H2 is rejected.

4. Discussion

This study provides empirical support for the role of corporate governance in reducing earnings management, consistent with prior research grounded in agency theory [27]. The significant negative relationship found between governance quality and earnings management aligns with the findings of Nguyen [5] and [22], who argue that stronger internal controls and oversight mechanisms reduce managerial discretion and thus constrain opportunistic financial reporting.

Interestingly, this study found that the presence of female directors did not significantly moderate the effect of corporate governance on earnings management. This contradicts several earlier studies that emphasize the role of gender diversity in enhancing board effectiveness and ethical sensitivity [12, 13]. Our findings are more aligned with those of Karina [14] and Aryani [28], who observed that the influence of female directors may be context-dependent, particularly in developing markets like Indonesia where institutional, cultural, or hierarchical constraints might limit the real impact of female board members.

Several logical explanations for the significance of the moderation effect can be considered. First, despite the growing representation of female boards of directors in Indonesia, various structural barriers may still face women that hinder their ability to influence important decisions [29]. Secondly, women directors are perceived as symbolic in some companies, where they serve a compliance rather than empowerment function. This makes their role to real impact even more limited, including on the quality of governance or financial reporting outcomes [30].

The findings also resonate with Debnath [31]. In it, the finding is made that earnings management cannot be curbed by the presence of a female board of directors alone. Related to this, perhaps it can be strengthened by presenting other governance reinforcements and a supportive organizational culture. Referring to the theoretical view, the findings here provide information that there is a need to expand agency theory contextually if it is to be applied in emerging markets. Moderating mechanisms that are appropriate for use in developed countries may not be directly applicable to developing countries to produce the same effect. This is due to differences in board dynamics, gender norms, and the enforcement environment [3]

5. Conclusion

This research examines the effect of corporate governance on earnings management in non-cyclical consumer companies in Indonesia, as well as the moderating role of female directors. From the research findings, it is found that a strong governance structure will have good effectiveness in reducing earnings management. This is in line with the statement in agency theory, that better supervision can reduce managerial opportunism. With this, it is known that the need for corporate governance reform and law enforcement in emerging markets. One of them is Indonesia, this can improve the reliability of financial reporting. However, different results were obtained from previous studies on the moderating effect of female directors, namely in this study no statistical significance was found. This means that the presence of women on boards, while symbolically important, has not been able to substantially influence governance outcomes in the Indonesian context. Factors such as limited board authority, cultural dynamics, or symbolic representation may underlie this finding.

From a theoretical standpoint, the results call for a more nuanced understanding of how gender diversity functions within different institutional environments. While gender inclusion remains an important goal, its effectiveness as a corporate governance may depend on broader structural and cultural enablers that empower women to participate meaningfully in board decisions.

Practically, the findings underscore the need for regulators and corporate policymakers not only to promote board diversity through quotas or guidelines, but also to foster inclusive governance cultures where female directors can exert real influence. Future research may benefit from exploring qualitative aspects of board dynamics, or assessing the effect of female leadership roles beyond board membership, such as audit committees or executive positions of informed consent as “Informed consent was obtained from all individual participants included in the study.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare no conflict of interest in the research and creation of this study.

References

[1] S. Alves, “Gender diversity on corporate boards and earnings management: Evidence for European Union listed firms,” Cogent Business and Management, vol. 10, no. 1, 2023, doi: 10.1080/23311975.2023.2193138.

[2] M. T. Khan, I. Khan, and S. R. Khan, “The Impact of Corporate Governance on Earning Management of Non-Financial Firms: Evidence from Pakistan,” International Review of Management and Business Research, vol. 10, no. 1, pp. 304–312, Mar. 2021, doi: 10.30543/10-1(2021)-26.

[3] E. Mensah and C. Boachie, “Corporate governance mechanisms and earnings management: The moderating role of female directors,” Cogent Business and Management, vol. 10, no. 1, 2023, doi: 10.1080/23311975.2023.2167290.

[4] CNBC Indonesia, “Tiga Pilar dan Drama Penggelembungan Dana.,” 2019.

[5] Q. Nguyen, M. H. Kim, and S. Ali, “Corporate governance and earnings management: Evidence from Vietnamese listed firms,” International Review of Economics & Finance, vol. 89, pp. 775–801, Jan. 2024, doi: 10.1016/j.iref.2023.07.084.

[6] M. M. K. Burghleh and S. K. Al-Okdeh, “The impact of family ownership concentration on the relationship between the characteristics of board of directors and earnings management,” Management Science Letters, pp. 969–978, 2020, doi: 10.5267/j.msl.2019.11.014.

[7] M. Elnahass, A. Salama, and N. Yusuf, “Earnings management and internal governance mechanisms: The role of religiosity,” Res Int Bus Finance, vol. 59, p. 101565, Jan. 2022, doi: 10.1016/j.ribaf.2021.101565.

[8] R. Fitrasari, “THE EFFECT OF BOARD SIZE, BOARD INDEPENDENCE, AND THE COMPOSITION OF BOARD INDEPENDENCE ON ACCRUAL AND REAL EARNINGS MANAGEMENT,” Jurnal Akuntansi dan Keuangan Indonesia, vol. 20, no. 2, pp. 222–241, Dec. 2023, doi: 10.21002/jaki.2023.12.

[9] P. N. Githaiga, P. Muturi Kabete, and T. Caroline Bonareri, “Board characteristics and earnings management. Does firm size matter?,” Cogent Business and Management, vol. 9, no. 1, 2022, doi: 10.1080/23311975.2022.2088573.

[10] G. Ginesti, A. Caldarelli, and A. Zampella, “Exploring the impact of intellectual capital on company reputation and performance,” Journal of Intellectual Capital, vol. 19, no. 5, pp. 915–934, Aug. 2018, doi: 10.1108/JIC-01-2018-0012.

[11] M. A. Alhossini, A. M. Zalata, S. E. Samaha, and M. Hessian, “Monitoring female directors and earnings management, does corporate governance matter?,” Cogent Business and Management, vol. 11, no. 1, 2024, doi: 10.1080/23311975.2024.2396538.

[12] A. A. Gull, M. Nekhili, H. Nagati, and T. Chtioui, “Beyond gender diversity: How specific attributes of female directors affect earnings management,” The British Accounting Review, vol. 50, no. 3, pp. 255–274, Apr. 2018, doi: 10.1016/j.bar.2017.09.001.

[13] A. M. Zalata, C. Ntim, A. Aboud, and E. Gyapong, “Female CEOs and core earnings quality: New evidence on the ethics versus risk-aversion puzzle,” in Business and the Ethical Implications of Technology, Springer, 2022, pp. 209–228. doi: 10.1007/s10551-018-3918-y.

[14] R. Karina, “Corporate governance and earnings management: Does gender matter?,” Jurnal Akuntansi dan Auditing Indonesia, vol. 25, no. 2, 2021, doi: 10.20885/jaai.vol25.i.

[15] K. M. Eisenhardt, “Agency Theory: An Assessment and Review,” Academy of Management Review, vol. 14, no. 1, pp. 57–74, 1989.

[16] I. Maulana, B. Haryadi, and M. Arief, “The Corporate Governance Mechanism on Earnings Management and Firm Performance,” AKRUAL: Jurnal Akuntansi, vol. 14, no. 1, pp. 1–16, Sep. 2022, doi: 10.26740/jaj.v14n1.p1-16.

[17] Y. P. Meyditiya, S. A. W. Nasititi, and I. I. Astuti, “PENGARUH CORPORATE GOVERNANCE, PROFITABILITAS, LEVERAGE, UKURAN PERUSAHAAN DAN GENDER DIVERSITY TERHADAP MANAJEMEN LABA,” JURNAL ILMIAH MANAJEMEN DAN AKUNTANSI, vol. 1, no. 4, pp. 01–15, Jul. 2024, doi: 10.69714/nj88mj69.

[18] E. F. Fama and M. C. Jensen, “Agency Problems and Residual Claims,” J Law Econ, vol. 26, no. 2, pp. 327–349, Jun. 1983, doi: 10.1086/467038.

[19] G20/OECD Principles of Corporate Governance 2023. OECD, 2023. doi: 10.1787/ed750b30-en.

[20] S. Tang and S. Shandy, “Analisis Pengaruh Karakteristik Dewan Terhadap Manajemen Laba,” Gorontalo Accounting Journal, vol. 4, no. 2, p. 159, Oct. 2021, doi: 10.32662/gaj.v4i2.1707.

[21] P. M. Healy and J. M. Wahlen, “A Review of the Earnings Management Literature and Its Implications for Standard Setting,” Accounting Horizons, vol. 13, no. 4, pp. 365–383, Dec. 1999, doi: 10.2308/acch.1999.13.4.365.

[22] R. A. Auliana, B. Subroto, and I. Subekti, “The effect of corporate governance on earnings management moderated by political connection,” Journal of Accounting and Investment, vol. 24, no. 3, pp. 654–675, Jun. 2023, doi: 10.18196/jai.v24i3.17390.

[23] N. Dong, F. Wang, J. Zhang, and J. Zhou, “Ownership structure and real earnings management: Evidence from China,” Journal of Accounting and Public Policy, vol. 39, no. 3, p. 106733, May 2020, doi: 10.1016/j.jaccpubpol.2020.106733.

[24] M. Harakeh, W. El-Gammal, and G. Matar, “Female directors, earnings management, and CEO incentive compensation: UK evidence,” Res Int Bus Finance, vol. 50, pp. 153–170, Dec. 2019, doi: 10.1016/j.ribaf.2019.05.001.

[25] T. G. Arun, Y. E. Almahrog, and Z. Ali Aribi, “Female directors and earnings management: Evidence from UK companies,” International Review of Financial Analysis, vol. 39, pp. 137–146, May 2015, doi: 10.1016/j.irfa.2015.03.002.

[26] P. M. Dechow, R. G. Sloan, and A. P. Sweeney, “Detecting Earnings Management,” The Accounting Review, vol. 70, no. 2, pp. 193–225, Apr. 1995.

[27] M. C. Jensen and W. H. Meckling, “Theory of the firm: Managerial behavior, agency costs and ownership structure,” J financ econ, vol. 3, no. 4, pp. 305–360, Oct. 1976, doi: 10.1016/0304-405X(76)90026-X.

[28] Y. A. Aryani, A. E. Mahendrastiti, D. Setiawan, T. Arifin, and E. Gantyowati, “Women director characteristics and earnings quality: evidence from banking industry in Indonesia,” Cogent Business and Management, vol. 11, no. 1, 2024, doi: 10.1080/23311975.2024.2304371.

[29] N. Orazalin, “Board gender diversity, corporate governance, and earnings management: Evidence from an emerging market,” Gend Manag, vol. 35, no. 1, pp. 37–60, Feb. 2019, doi: 10.1108/GM-03-2018-0027.

[30] Y. Mnif and I. Cherif, “Female board directorship and earnings management,” Pacific Accounting Review, vol. 33, no. 1, pp. 114–141, 2020, doi: 10.1108/PAR-04-2020-0049.

[31] N. C. Debnath, B. C. M. Patnaik, and I. Satpathy, “Female directorship and real earnings management in Bangladesh: Towards an analytical assessment,” Management Science Letters, vol. 9, no. 11, pp. 1723–1740, 2019, doi: 10.5267/j.msl.2019.6.018.