ASSESSING EARNINGS MANAGEMENT: CONTRIBUTIONS OF CORPORATE BOARDS, FOREIGN AUDITORS, AND STRATEGIC ALLIANCES

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How to cite this paper: Kaur, A., Singh, A., & Maheshwari, G. C. (2025). Assessing earnings management: Contributions of corporate boards, foreign auditors, and strategic alliances. *Corporate Board: Role, Duties and Composition, 21*(2), 81–91. https://doi.org/10.22495/cbv21i2art7

ISSN Online: 2312-2722
ISSN Print: 1810-8601

Received: 07.05.2025
Revised: 30.06.2025; 06.07.2025; 30.07.2025
Accepted: 08.08.2025

JEL Classification: M10, M40, M41, M48
DOI: 10.22495/cbv21i2art7

Abstract

This study investigates how corporate board characteristics, foreign auditors, and strategic alliances influence earnings management (EM) among Indian listed firms, an issue of growing concern due to widespread accounting scandals and weak institutional enforcement in emerging markets. Using a panel dataset of firms listed in the NIFTY 500 index from 2014 to 2019, the study estimates earnings manipulation via the modified Jones (1991) model and employs fixed effects and two-stage least squares regression models to address endogeneity. The findings show that board independence and the presence of foreign auditors significantly reduce EM, while greater board activity is positively associated with EM. The influence of board size is marginal, and the findings suggest the limited utility of relational governance in India's institutionally weak environment. Robustness tests using alternative EM proxies confirm these findings. This study contributes to the governance literature by highlighting the nuanced roles of formal and informal governance under institutional voids, offering practical insights for regulators, investors, and policymakers in emerging economies.

Keywords: Foreign Auditors, Board of Directors, Strategic Alliance, Discretionary Accruals, Corporate Governance

Authors' individual contribution: Conceptualization — A.K., A.S., and G.C.M.; Methodology — A.K.; Software — A.K.; Formal Analysis — A.K.; Resources — A.K., A.S., and G.C.M.; Data Curation — A.K.; Writing — Original Draft — A.K.; Writing — Review & Editing — A.K., A.S., and G.C.M.; Supervision — A.S. and G.C.M.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Managerial accounting fraud has emerged as the primary factor behind major corporate scandals, exemplified by cases like Kingfisher, WorldCom, Enron, and Satyam. This has led researchers to explore corporate governance (CG) as a potential remedy for agency issues (Abdou et al., 2021). Studies suggest that CG significantly contributes to supervising management activities and curbing opportunistic behaviors, thus reducing agency costs (Sáenz González & García-Meca, 2014). Within CG, the board of directors plays a crucial role as the pinnacle of the decision control mechanism, overseeing top management and harmonizing the interests of managers and stakeholders to address agency problems (Jensen & Meckling, 1976; Fama & Jensen, 1983). Research in developed nations has highlighted the importance of corporate boards in regulating earnings management (EM) through accruals (Feng & Huang, 2021; Saona et al., 2020). Nevertheless, the relationship between corporate boards and EM remains debated in both theoretical and empirical contexts (Ramdani & van Witteloostuijn, 2010).

CG research on EM is often framed through the lenses of agency theory and stewardship theory, which offer contrasting perspectives on managerial behavior and board effectiveness. Agency theory posits that the separation of ownership and control creates conflicts of interest, wherein self-interested managers may engage in opportunistic behaviors like EM unless constrained by strong governance mechanisms (Fama & Jensen, 1983). This view supports independent, smaller boards as effective monitors, reducing coordination issues and enhancing vigilance (Sáenz González & García-Meca, 2014). In contrast, stewardship theory contends that managers, as stewards, are intrinsically motivated to act in the organization's best interest, suggesting that internal directors and larger, more cohesive boards can promote trust, long-term orientation, and effective decision-making (Davis et al., 1997; Ramdani & van Witteloostuijn, 2010). These divergent theories inform empirical work on board composition, yet findings remain inconclusive, highlighting the need for context-specific analyses, particularly in emerging markets like India, where institutional voids may moderate or distort these governance mechanisms.

The existing literature on CG primarily focuses on traditional mechanisms such as institutional ownership and executive compensation. While these mechanisms are considered effective within established legal and institutional frameworks (Potharla et al., 2021) and have shown promise in some developing nations, the scope of CG research has expanded beyond the conventional principal-agent relationships (Hambrick et al., 2008).

Aguilera et al. (2008) argued that the effectiveness of these mechanisms depends on their alignment with a wide range of societal institutions, which can differ across cultures and evolve. They further posited that institutional factors shape the motivations and methods of oversight, reflecting shared values and normative understandings of corporate purpose. The interplay between diverse institutions and environments leads to variations in the efficacy of governance practices and corporate reporting (Elghuweel et al., 2017). In emerging economies undergoing transition, alternative governance mechanisms play a crucial role in complementing institutional conditions (Yiu et al., 2019). This study uses panel estimation techniques to evaluate the impact of corporate board characteristics and alternative governance on EM.

In India's emerging market context, institutional voids, manifested through weak legal enforcement, regulatory gaps, and inconsistent protection of investor rights, significantly influence the effectiveness of CG mechanisms in curbing EM, particularly through discretionary accruals. These voids act as moderators and mediators in the governance-EM relationship. For instance, while greater board independence, larger boards, and frequent board meetings are theoretically designed to enhance oversight and reduce managerial discretion, their impact in India is often diluted by weak institutional support, where enforcement of board decisions and accountability mechanisms remains limited. Similarly, the monitoring role of foreign auditors, who are expected to enforce higher reporting standards, may be compromised when institutional voids undermine audit enforcement and investor recourse against malpractice. Conversely, these institutional deficiencies heighten reliance on alternative governance mechanisms such as strategic alliances and relational networks, which can substitute for formal institutional enforcement by promoting trust, reputation-based discipline, and informal monitoring. In this way, institutional voids mediate the governance-EM relationship by redirecting the pathway of influence toward informal governance practices while moderating the strength of formal governance controls on discretionary accrual-based EM. This complex interplay highlights the need to account for institutional context when assessing the efficacy of governance mechanisms in reducing EM in India.

We propose that effective CG, measured by board characteristics and alternative governance mechanisms, likely constrains EM practices through discretionary accruals. Our findings indicate that larger boards and a higher proportion of independent directors limit opportunistic managerial behavior, as evidenced by reduced earnings manipulation. However, more active boards are less likely to disclose their economic performance. We also investigate whether strategic alliances and foreign auditors (Big Four) effectively curb EM. Our results show that firms employing foreign auditors exhibit reduced EM, while those with alliance partners report higher discretionary accruals. These findings contribute to the existing literature by demonstrating that EM is influenced by board composition and alternative governance mechanisms.

Our study advances EM and CG literature in two key ways. First, we extend this research to an emerging economy, examining how existing governance structures influence EM in India. This is particularly relevant as emerging economies attract significant global trade and investment, yet their financial reporting is often perceived as inaccurate and unreliable (Li et al., 2014). Second, we explore less-studied but critical aspects of CG by investigating the role of alternative governance in earnings manipulation. Additionally, we provide one of the first assessments of the relationship between board activity and discretionary accruals using panel data in the Indian context.

The study is structured as follows. Section 2 presents hypotheses based on relevant literature. Section 3 outlines the study sample and research model. Section 4 discusses the findings, while Section 5 concludes with research implications, limitations, and future research directions.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Prior literature on EM asserts that information asymmetry due to the separation of ownership and control gives rise to agency problems (Waweru & Prot, 2018). The motivation for managers to employ discretionary accruals for conveying signals concerning a firm's reporting quality and potential future earnings to current and prospective investors also derives from information asymmetry (Lin et al., 2016). It also occurs when the company's market value is tied to the signaller's incentive, which may actuate management to signal information that would further their interest (Katmon & Al Farooque, 2017). Managers can utilize such information asymmetry to alter financial reports (Mangala & Dhanda, 2022), as EM can be used to secure their jobs and increase their compensation. However, a board is considered the apex of decision control

rights and supervises managers effectively (Fama & Jensen, 1983). Therefore, having a board assures reliable financial reporting and safeguards shareholders' interests. Nevertheless, the empirical literature shows mixed findings. Xie et al. (2003) document the reduced occurrence of earnings manipulation in the presence of independent directors, but Orazalin (2020) shows a weak association between independent directors and EM. The following subsections review prior studies on the interface of EM and governance mechanisms.

2.1. Board independence

Prior studies reinforce that independent directors are more credible in monitoring firms (Fama & Jensen, 1983). Due to a lack of personal interest and family ties in the corporate ownership structure, independent directors provide unbiased opinions and are more inclined to adhere to the objective of shareholders' wealth maximization (Saona et al., 2020). Empirically speaking, independent directors' presence reduces the likelihood of financial fraud and strengthens investors' faith in reported financial statements (Wu et al., 2016). The recent findings of Abdou et al. (2021) show that firms with a high proportion of independent outside directors have lower levels of EM. Other empirical research also supports the negative association between board independence and EM practices (Kapoor & Goel, 2017; Chouaibi et al., 2018). However, Orazalin (2020) casts doubt on diminishing EM practices in the presence of independent directors in Kazakhstan. Similarly, Waweru and Prot (2018) show a significant positive association between board independence and EM in East Africa. Based on the inconclusive findings, we hypothesize that:

H1: Earnings management is associated with the proportion of independent directors.

2.2. Board size

There is no concordance between the arguments in the literature concerning EM and board size. From the standpoint of agency theory, smaller boards are more effective in monitoring firms. Lipton and Lorsch (1992) assert that small board sizes are not subject to communication, coordination, and free-rider problems. Consequently, smaller boards are perceived to be less time-consuming, more effective, and better at controlling and mitigating EM practices (Abdou et al., 2021). On the contrary, larger boards are more likely to be watchful of agency problems because many experienced directors will monitor managerial actions (Saona et al., 2020). An increased board size can restrict opportunistic managerial behavior due to members' diverse knowledge and skills (Xie et al., 2003; Chouaibi et al., 2018). Consistent with this, larger boards are also less likely to be engaged in EM practices (Orazalin, 2020; Saona et al., 2020). Given this continued debate, we do not extend any sign on the association of EM and board size. Consequently, the following hypothesis is put forth:

H2: A significant association exists between earnings management and board size.

2.3. Board activity

Board meetings are another vital aspect of board characteristics, representing the intensity of board activity. Anglin et al. (2013) reveal that EM practices are less likely to occur in firms where boards meet more often. The probable reason could be that directors get sufficient time to execute their duties and responsibilities in conformity with shareholders' interests, thereby enhancing the firm's performance. Similarly, Xie et al. (2003) claim that boards that meet seldom may not have time to address challenges and perhaps only rubber-stamp management strategies. However, in contrast, Lorca et al. (2011) state that chief executive officers (CEOs) often prepare the agenda for board meetings, and routine duties dominate much of the time directors spend together. Hence, board meetings are not always beneficial. Using data from Nigerian companies, Obigbemi et al. (2016) conclude that there is a positive and significant association between EM practices and the frequency of board meetings. Similarly, Chen et al. (2006) conclude that the number of board meetings may escalate in times of financial difficulty or controversial choices involving unlawful or dubious actions. Based on the above discussion, we do not extend directional expectations on board meetings and EM association. Thus, the following hypothesis is advanced:

H3: Board meetings and earnings management are significantly associated.

2.4. Alternative governance mechanisms

Corporate governance reforms that have evolved in one institutional setting may not be beneficial in another (Yiu et al., 2019). The interconnectedness of different institutions and diverse environments causes variations in the efficacy of varying governance practices (Aguilera et al., 2008). Institutions can be both formal and informal (North, 1990). Informal institutions become operative and considered more reliable when formal institutions are ineffective or not inclined to proper functioning. In the transition process of emerging economies, complementing institutional conditions, alternative governance mechanisms play a crucial role (Yiu et al., 2019). We proxy such alternative governance mechanisms by strategic alliances and foreign auditors.

2.4.1. Strategic alliances

Due to significant constraints in pooling resources, coordinating activities, and managing information asymmetries within formal and informal institutional frameworks, network-based relationships in strategic alliances have emerged as a powerful form of alternative governance (Peng & Heath, 1996). Strategic alliances go beyond mere transactional cost efficiencies; they are built on enduring relational ties and mutual trust developed through repeated interactions (Gulati, 1995). This trust is an essential governance mechanism, reducing the need for costly formal contracts and external enforcement. The relational governance that characterizes alliances provides a credible structure for managing inter-organizational exchanges, as interactions are anchored in norms of reciprocity, faith, and shared understanding (Poppo & Zenger, 2002).

A critical feature of this governance form is the disciplining effect of reputational considerations. Firms within alliances are acutely aware that opportunistic behavior can result in significant

reputational penalties from their immediate partners and broader networks of potential collaborators (Kang, 2008). This reputational logic strengthens self-enforcement, as alliance members are incentivized to monitor, control, and support each other's conduct to safeguard mutual esteem and future relational capital. Moreover, the long-term orientation inherent in many alliances fosters relationship-specific investments, reduces opportunistic behavior, and enhances the motivational alignment of partners (Yiu et al., 2019). Long-term alliances create a context in which firms can absorb short-term imbalances and maintain cooperative behaviors by replenishing obligations and commitments over time (Das & Rahman, 2010). In contrast, while short-term alliances may sometimes stimulate opportunism (Das, 2004), the strategic design of enduring alliances provides a robust governance alternative to formal institutional mechanisms.

Thus, strategic alliances operate as an alternative governance that substitutes formal controls with relational safeguards, trust-based enforcement, and reputational accountability, collectively creating a robust structure for reducing opportunistic behavior, including aggressive EM practices. Therefore, the following hypothesis is advanced:

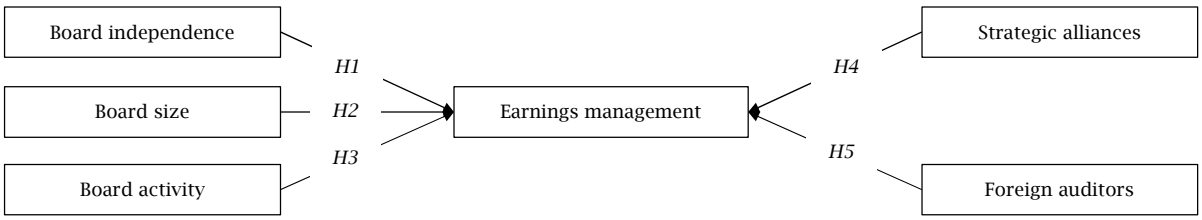
H4: Earnings management and the firms involved in strategic alliances are negatively associated.

2.4.2. Foreign auditors

Foreign auditors play the role of alternative governance mechanisms by exposing firms to more rigid international norms or CG regimes and acting as detectors of corporate misconduct (Yiu et al., 2019). As conceptualized by Jensen and Meckling (1976), the bonding mechanism implies that Big Four auditors may act more stringently in weak legal environments compared to robust legal environments (Choi & Wong, 2007). In nations with robust legal systems, country-level governance is already in place to safeguard investors' interests. As a result, the demand for quality audits is low. High-quality audits are typically required in nations with lax legal systems. Fan and Wong (2005) assert that foreign auditors are robust bonding mechanisms in emerging economies. Furthermore, foreign auditors are considered the "first line of defense". They are perceived to be more reliable and independent since they are not constrained and offer affirmation by maintaining accounting quality and financial disclosure practices (Yiu et al., 2019). Prior empirical research proves that foreign auditors effectively curb EM practices (Abdou et al., 2021). Therefore, we predict foreign auditors will act as an alternative governance mechanism limiting EM.

H5: Earnings management is inversely associated with the use of foreign auditors.

Figure 1. Conceptual framework of the study



3. RESEARCH METHODOLOGY

Our study sample comprises the NIFTY 500 index for 2014–2019. As of March 29, 2019, this accounts for 96.1% of the free-float market capitalization of the listed companies on the National Stock Exchange of India[1]. In line with the previous studies (Kapoor & Goel, 2017; Saona et al., 2020; Gerged et al., 2021), financial institutions were eliminated from the sample due to their peculiar accounting practices and business nature. We further excluded firms with missing values due to incomplete records. This leads us to a final sample of 400 companies over six years (2014–2019), comprising 2374 firm-year observations. To estimate discretionary accruals, financial data is collected for seven years (2013–2019). This period would identify the impact of the Companies Act of 2013, which was revised after 57 years. Financial data was procured from "Prowess IQ" and Refinitive Securities Data Company Platinum. Annual reports served as the source for variables concerning CG.

3.1. Dependent variable

In prior studies, EM has been proxied using abnormal accruals (Jones, 1991; Dechow et al., 1995). Therefore, in line with the previous literature (Orazalin, 2020; Sakawa & Watanabel, 2021; Ali et al., 2022), we estimate accruals-based EM using the modified Jones (1991) model, as proposed by Dechow et al. (1995). Empirically, the modified Jones model has been proven to have the maximum power in identifying EM (Dechow et al., 1995). Discretionary and non-discretionary accruals add up to total accruals. Non-discretionary accruals are computed as a portion of total accruals to estimate discretionary accruals. Firstly, the total accruals are calculated using Eq. (1):

$$T.ACC_{it} = \Delta CA_{it} - \Delta CASH_{it} - DEP_{it} + \Delta DCL_{it} - \Delta CL_{it} \quad (1)$$

where,

- $T.ACC_{it}$ denotes total accruals;
- ΔCA_{it} represents a change in current assets;
- $\Delta CASH_{it}$ signifies a change in cash and cash equivalents;
- DEP_{it} signifies a change in depreciation and amortization expenses for firm *i* in the year *t*;
- ΔDCL_{it} denotes changes in short-term debt included in current liabilities;
- ΔCL_{it} refers to a change in current liabilities.

Further, we estimated the modified Jones model as described in Eq. (2) below.

[1] https://www.nseindia.com/products-services/indices-nifty500-index

$$\frac{T.ACC_{it}}{A_{(it-1)}} = \alpha_1 \frac{1}{A_{(it-1)}} + \alpha_2 \frac{(\Delta REV_{it} - \Delta REC_{it})}{A_{(it-1)}} + \alpha_3 \frac{PPE_{it}}{A_{(it-1)}} + \varepsilon_{it} \quad (2)$$

where,

- total assets in the year $t-1$ are denoted by $A_{(it-1)}$;
- ΔREV_{it} signifies net revenue in the year t less net revenue in the year $t-1$;
- ΔREC_{it} denotes changes in accounts receivable;
- PPE_{it} represents gross property, plant, and equipment for firm i in the year t;
- ε_{it} is the residual value, proxied as discretionary accruals.

However, managers may manipulate earnings by employing accruals that either increase or decrease income. We estimate the combined effect by using the absolute value of residuals. This measurement follows the prior studies (Kapoor & Goel, 2017; Orazalin, 2020; Gerged et al., 2021; Sakawa & Watanabel, 2021).

3.2. Model specification

We examine the following panel regression models to investigate the advanced hypotheses and estimate the effects of alternative governance, board composition, and control variables on EM. Model A evaluates the association between board composition and EM. Model B investigates the alternative governance and EM nexus.

Model A

$$D.ACC_{it} = \beta_0 + \beta_1 PBIN_{it} + \beta_2 TBSIZ_{it} + \beta_3 TBM_{it} + \sum_{n=1}^{5} \beta_n CONTROL_{it} + \delta_t + \varepsilon_{it} \quad (3)$$

Model B

$$D.ACC_{it} = \beta_0 + \beta_1 TSA_{it} + \beta_2 FAUD_{it} + \sum_{n=1}^{5} \beta_n CONTROL_{it} + \delta_t + \varepsilon_{it} \quad (4)$$

where, *D.ACC* signifies the absolute value of discretionary accruals; *CONTROL* signifies five control variables: *FLV*, *ROA*, *LIQD*, *FSIZ*, *FGRO*; δ_t is year-fixed effects; ε_{it} is an error term.

Fixed effect and random effect regression are prevalent techniques for modeling panel data regression (Kapoor & Goel, 2017). We estimated the effectiveness of fixed and random effect model parameters using the Hausman specification test. The test results reveal that the coefficients of fixed and random effect models are significantly different, signifying the suitability of the fixed effect model for this study.

Table 1. Definition and operationalization of research variables

Variables	*Acronym*	*Definition and operationalization*
Dependent variable		
Discretionary accruals	*D.ACC*	Residuals computed using the modified Jones model.
Independent variables		
Board independence	*PBIN*	Percentage of independent directors on the board.
Board size	*TBSIZ*	Number of directors on the board.
Board activity	*TBM*	Number of board meetings held in a year.
Number of alliances	*TSA*	Number of strategic alliances formed with the firm in a year.
Foreign auditor	*FAUD*	Dummy variable: "1" if the firm employs a Big Four auditor and "0" otherwise.
Control variables		
Financial leverage	*FLV*	Ratio of long-term debt divided by total assets.
Firm profitability	*ROA*	Net income divided by total assets.
Liquidity	*LIQD*	Ratio of current assets to current liabilities.
Firm size	*FSIZ*	Natural logarithm of total assets.
Firm growth	*FGRO*	Percentage change in sales year-on-year.

Source: Authors' elaboration.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Table 2 presents the descriptive statistics for the variables examined in the study. The results for *D.ACC* show an average of 0.143, ranging from 0.00 to 1.669, indicating that Indian companies manipulate their earnings by increasing or decreasing accruals. The *PBIN* averages 45.14%, ranging from 0% to 100%. The minimum of 0% is in line with the conclusions of Kapoor and Goel (2017). This implies that a few Indian companies have violated corporate policy by failing to meet a minimum threshold of 33.33%. The mean *TBSIZ* is 10.3 directors, while the average *TBM* is 6.516 times yearly. The number of strategic alliances (*TSA*) ranges from zero to fourteen, with a mean value of 0.2051, suggesting the majority of the sampled firms had few strategic alliance partners. The Indian companies audited by Big Four auditors (*FAUD*) comprised 54.4% of the sample companies. The average *LIQD* and *FLV* ratios for Indian companies are 2.408 and 0.0862, respectively, indicating lower debt levels. The average *FSIZ* and *FGRO* are 8.124 and 10.84%, respectively.

Further, the variance inflation factor (VIF) is employed to estimate multicollinearity among the independent variables. A VIF value greater than

10 poses a severe issue of multicollinearity in the regression analysis (Chatterjee & Hadi, 2012). The highest estimated VIF value is 1.78, significantly lower than the threshold value of 10, demonstrating that the study has no multicollinearity issues.

Table 2. Descriptive statistics

Variables	*Observations*	*Mean*	*Std. dev.*	*Min.*	*Max.*	*VIF*
D.ACC	2374	0.143	0.1476	0.00	1.669	-
PBIN (percent)	2374	45.14	17.41	0.00	100	1.20
TBSIZ	2374	10.30	3.453	3	28	1.47
TBM	2374	6.516	3.346	2	59	1.14
TSA	2374	0.2051	0.7456	0	14	1.11
FAUD	2374	0.544	0.4981	0	1	1.04
FLV	2374	0.0862	0.1397	0.00	2	1.17
ROA	2374	0.992	0.7547	0.00	16.28	1.13
LIQD	2374	2.408	2.539	0.00	33.85	1.12
FSIZ	2374	8.124	1.624	0.6733	13.56	1.78
FGRO (percent)	2374	10.84	20.19	-96.40	98.63	1.04

Source: Authors' elaboration.

Table 3 represents the correlation matrix of research variables. Pallant (2007) defines multicollinearity as a problem in regression analysis when the correlation coefficient between independent variables is more than 0.7. The maximum reported correlation is 0.55 between *FSIZ* and *TBSIZ*, which is less than the threshold value of 0.7, signifying the absence of multicollinearity in the current study. Further, we find that correlation coefficients for *PBIN*, *TBSIZ*, *FAUD*, and *FSIZ* are negative and statistically significant with *D.ACC*, while *TBM*, *FLV*, and *ROA* are significant and positively associated with *D.ACC*.

Table 3. Correlation matrix

	D.ACC	*PBIN*	*TBSIZ*	*TBM*	*TSA*	*FAUD*	*FLV*	*ROA*	*LIQD*	*FSIZ*	*FGRO*
D.ACC	1										
PBIN	-0.206**	1									
TBSIZ	-0.186**	0.225**	1								
TBM	0.127**	-0.274**	0.011	1							
TSA	-0.031	0.066**	0.177**	0.095**	1						
FAUD	-0.094**	0.097**	-0.016	-0.115**	0.038	1					
FLV	0.104**	-0.059**	0.035	0.085**	0.011	-0.095**	1				
ROA	-0.066**	-0.062**	-0.105**	-0.031	-0.032	-0.009	-0.168**	1			
LIQD	-0.025	0.004	-0.047*	-0.012	-0.021	0.071**	-0.247**	-0.126**	1		
FSIZ	-0.244**	0.239**	0.550**	0.085**	0.298**	0.053**	0.201**	-0.243**	-0.124**	1	
FGRO	0.033	-0.075**	-0.105**	0.068**	-0.009	0.018	-0.093**	0.080**	0.016	-0.145**	1

*Note: 1% and 5% levels are indicated by ** and *, respectively.*
Source: Authors' elaboration.

4.2. Regression results

Table 4 presents discretionary accruals fixed effect regression results with board composition and alternative governance variables. The reported R^2 for Model A and Model B are 0.3972 and 0.3986, respectively, signifying that Model A explains 39.72% and Model B explains 39.86% of the variation in EM. To address endogeneity, we employ two-stage least squares regression. Findings are presented in Table 5. We did not find any significant deviation in the regression results.

The estimated coefficient of *PBIN* shows an inverse association with EM at a 1% significance level. This lends empirical support to *H1* and follows agency theory predictions. Our findings are consistent with the results of Xie et al. (2003), Wu et al. (2016), Saona et al. (2020), and Abdou et al. (2021). The results portray a reduction in the EM practices of Indian companies owning a significant proportion of independent directors on a board. The inverse association signifies that the absence of personal interests and family ties is more likely to inhibit opportunistic managerial behavior (Saona et al., 2020), resulting in high-quality reported earnings with lower discretionary accruals. This can benefit shareholders, as the potential for manipulative practices is reduced. Additionally, it underscores the importance of having a balanced and independent board to uphold corporate integrity and protect stakeholders' interests.

Although the literature has not agreed on the relationship between EM and *TBSIZ*, our findings indicate a negative association, significant at the 10% level. While this significance level suggests a potentially meaningful relationship, it warrants cautious interpretation, reflecting only marginal statistical support for *H2*. Larger boards may help constrain managerial opportunism through greater diversity of knowledge, enhanced monitoring capacity, and broader expertise (Xie et al., 2003). In contrast, smaller boards may face resource and oversight limitations, increasing the risk of less transparent reporting and discretionary accrual use. Our findings are directionally consistent with prior studies (Xie et al., 2003; Chouaibi et al., 2018; Orazalin, 2020; Saona et al., 2020), which support the role of board size in strengthening governance mechanisms. However, given the relatively weaker statistical significance, this evidence should be considered indicative rather than conclusive. Nonetheless, the observed trend may still reflect the positive influence of CG reforms introduced under the Companies Act of 2013, which aimed to improve board structures and monitoring effectiveness among listed Indian firms.

The estimated coefficient between *TBM* and EM is positive and statistically significant at 5%. The results show that having more board meetings encourages the manipulation of earnings through discretionary accruals, thus supporting *H3*. The findings are consistent with those of Obigbemi

et al. (2016). This association could be due to the controversial choices involving unlawful or dubious actions the company has engaged in, leading to additional meetings. In other words, the directors of the firms that manipulate earnings may be required to meet more often as some activities or choices are questionably lawful, resulting in more meetings (Chen et al., 2006). As a result, regulatory bodies should pay close attention to the frequency and content of board meetings within the companies they oversee, as increased board meetings could potentially be used to facilitate EM.

The variable *TSA* is positive and statistically insignificant in explaining its association with *D.ACC*, indicating that firms engaged in strategic alliances are ineffective in constraining EM. Consequently, *H4* is not supported. This result aligns with the findings of Demirkan and Demirkan (2014), who observed that contractual alliances may not always contribute to higher earnings quality, and is consistent with Das and Rahman (2010), who noted opportunistic behavior in such collaborative arrangements. However, the absence of a significant relationship merits deeper scrutiny, as it challenges the expectation that strategic alliances, as a form of relational governance, substitute for formal institutional controls by fostering trust, mutual monitoring, and reputational discipline. In the Indian context, pervasive institutional voids — including weak legal enforcement and lack of effective contract enforcement — may explain this null effect, which undermines the normative and reputational foundations of relational governance. Unlike in more mature institutional environments, where relational ties can discipline opportunistic behavior through self-enforcing trust mechanisms, Indian firms may find it difficult to sustain such informal accountability without credible regulatory backing. Furthermore, the proliferation of transactional or short-term alliances — often driven by market expediencies rather than strategic synergy — may dilute the effectiveness of alliance-based monitoring. This failure of relational governance suggests that strategic alliances alone are insufficient in mitigating EM risks where the broader institutional environment does not reinforce informal norms or penalize non-compliance.

The associated coefficient for *FAUD* is negative and statistically significant at 1%, suggesting Big Four auditors effectively restrain EM in Indian companies, thus confirming our hypothesis *H5*. Our findings are consistent with prior literature (Fan & Wong, 2005; Choi & Wong, 2007; Gerged et al., 2021), which reported lower levels of *D.ACC* in the companies audited by foreign auditors. They are considered the "first line of defense" for providing credibility, offering assurance, and sustaining quality accounting (Yiu et al., 2019). Hence, foreign auditors are perceived as more independent and less influenced by local pressures, political interests, or personal relationships that could lead to bias in the audit process. Moreover, they often have global reputations to uphold. Any perception of lax audit quality or unethical behavior can have far-reaching consequences for their credibility and marketability.

Concerning control variables, *ROA* is negative and statistically significant, signifying that EM using *D.ACC* is unlikely to happen in profitable firms. Our findings are consistent with the results of Kapoor and Goel (2017) and Orazalin (2020). They agree that high-performing firms are less likely to engage in EM (Buertey et al., 2020). *LIQD* is negative and significantly associated with *D.ACC*, indicating the unlikely engagement of highly liquid companies in EM. The results are similar to those of Katmon and Al Farooque (2017). Further, the estimated coefficients of *FLV*, *FSIZ*, and *FGRO* are insignificant, implying these firm-level factors have no bearing on the practices used by Indian companies to manage their earnings.

Table 4. Panel regression: Fixed effect model

Variables	*Expected sign*	*Model A*	*Model B*
PBIN	-	-0.0007*** (0.0003)	-
TBSIZ	+/-	-0.0020* (0.0732)	-
TBM	+/-	0.0023** (0.0400)	-
TSA	-	-	0.00175 (0.6925)
FAUD	-	-	-0.0427*** (0.0004)
FLV	+	0.0190 (0.6442)	0.0148 (0.7183)
ROA	-	-0.0155** (0.0398)	-0.0141* (0.0614)
LIQD	+/-	-0.0033* (0.0783)	-0.0033* (0.0783)
FSIZ	-	-0.0188 (0.0354)	-0.0229 (0.0071)
FGRO	+/-	-0.0002 (0.0678)	-0.0002 (0.0683)
Year fixed effects	+/-	Yes	Yes
Constant		0.3133*** (0.0000)	0.3494*** (0.0000)
N		2374	2374
Hausman test		0.00***	0.00***
Durbin-Watson		1.7574	1.7522
R^2		0.3972	0.3986

*Note: 10%, 5%, and 1% significance levels are indicated by *, **, and ***, respectively.*
Source: Authors' elaboration.

Table 5. Panel regression: Two-stage least squares

Variables	*Expected sign*	*Model A*	*Model B*
PBIN	-	-0.0004*** (0.0045)	-
TBSIZ	+/-	-0.0067** (0.0232)	-
TBM	+/-	0.0065* (0.0891)	-
TSA	-	-	0.00264 (0.7814)
FAUD	-	-	−0.0306*** (0.0009)
FLV	+	0.0081 (0.7331)	0.0157 (0.6072)
ROA	-	-0.0277* (0.0898)	-0.0029* (0.0915)
LIQD	+/-	-0.0076* (0.0692)	−0.0094* (0.0672)
FSIZ	-	-0.0276 (0.0265)	−0.0118 (0.0082)
FGRO	+/-	-0.0076 (0.0589)	−0.0008 (0.0574)
Constant		0.2043*** (0.0000)	0.2383*** (0.0000)
N		2374	2374
R^2		0.4914	0.4932

*Note: 10%, 5%, and 1% significance levels are indicated by *, **, and ***, respectively.*
Source: Authors' elaboration.

4.3. Additional analysis

We adopt an alternative measure of EM to examine the robustness of our findings. Most existing studies

have estimated *D.ACC* using the cross-sectional modified Jones (1991) model (Dechow et al., 1995; Xie et al., 2003; Orazalin, 2020; Ali et al., 2022). Therefore, to corroborate the original results, we employ the Jones (1991) model and the performance-matched modified Jones model (Kothari et al., 2005) as an alternative proxy for EM. The performance-matched modified Jones model corresponds to an adjustment by Kothari et al. (2005) to the modified Jones (1991) model. It is based on the premise that *D.ACC* is correlated with current and past year return on assets.

The findings employing the fixed-effects regression model are shown in Table 6. The dependent variable is an EM proxy estimated using the Jones (1991) model in Panel 1 and the performance-matched modified Jones model (Kothari et al., 2005) in Panel 2. The statistical relation of EM with board composition and alternative governance remains qualitatively similar, which enables us to corroborate that the previous results remain unaffected by employing a different proxy for *D.ACC*.

Table 6. Panel regression results of the alternative earnings management measure

Variables	*Expected sign*	*Panel 1: Jones (1991) model*		*Panel 2: Performance-matched modified Jones model*	
		Model A	*Model B*	*Model A*	*Model B*
PBIN	-	-0.0024** (0.0360)	-	-0.0011* (0.0613)	-
TBSIZ	+/-	-0.0108* (0.0936)	-	-0.0129** (0.0306)	-
TBM	+/-	0.0031* (0.0951)	-	0.0153* (0.0855)	-
TSA	-	-	0.0162 (0.3792)	-	0.0259 (0.4499)
FAUD	-	-	-0.1177** (0.0200)	-	-0.1610* (0.0879)
FLV	+	0.4681*** (0.0063)	0.4657*** (0.0064)	0.3817 (0.2319)	0.3600 (0.2584)
ROA	-	-1.1126*** (0.000)	-1.1099*** (0.000)	-1.9470*** (0.000)	-1.9508*** (0.000)
LIQD	+/-	-0.0120 (0.1287)	-0.0118 (0.1325)	-0.0054 (0.7113)	-0.0061 (0.6786)
FSIZ	-	-0.1020*** (0.0060)	-0.0885** (0.0125)	-0.0120 (0.8615)	0.0054 (0.9342)
FGRO	+/-	-0.0025*** (0.000)	-0.0025*** (0.000)	-0.0074*** (0.000)	-0.0074*** (0.000)
Year fixed effects	+/-	Yes	Yes	Yes	Yes
Constant		-1.7037*** (0.000)	-1.6584*** (0.000)	9.6189*** (0.000)	9.3756*** (0.000)
N		2374	2374	2374	2374
Hausman test		0.00***	0.00***	0.00***	0.00***
Durbin-Watson		1.2238	1.2236	1.2979	1.2909
R^2		0.7058	0.7061	0.9690	0.9690

*Note: 10%, 5%, and 1% significance levels are indicated by *, **, and ***, respectively.*
Source: Authors' elaboration.

5. CONCLUSION

This study examines how board composition and alternative governance mechanisms influence EM in Indian listed firms, offering theoretical insights grounded in agency and stewardship theories. Consistent with agency theory, greater board independence and foreign auditors significantly curb EM, highlighting the role of external and independent monitors in restraining managerial opportunism. While larger boards show a marginal negative association with EM, the positive relationship between board meeting frequency and EM suggests that increased board activity may reflect reactive or complicit governance, especially in contexts lacking transparency. From a stewardship perspective, strategic alliances are expected to promote trust and cooperative oversight; however, their ineffectiveness in mitigating EM in this study points to the limitations of relational governance in an environment marked by institutional voids and weak enforcement. These findings underscore the need to strengthen formal governance mechanisms and reinforce institutional frameworks that support their effectiveness. Ultimately, governance outcomes are shaped not just by internal structures but by the institutional quality in which they operate, highlighting the importance of design and context in achieving transparent financial reporting.

Our study provides important insights into India and other economies in similar contexts. The results advocate that companies with active boards and associations with alliance partners stimulate EM practices. These findings carry critical implications. Investors should closely examine the nature and depth of alliance partnerships rather than assuming governance strength based on alliance presence alone. Regulators may need to introduce alliance-specific disclosure norms and scrutiny mechanisms to reduce the risk of hidden opportunism. Auditors, too, must be vigilant in reviewing alliance-related transactions, especially where relational ties mask aggressive accrual practices. Overall, the ineffectiveness of strategic alliances in constraining EM underscores the need to integrate institutional theory into governance research, particularly within emerging economies like India, where informal governance mechanisms are often rendered fragile by weak formal institutions. Concerning board activity, the findings challenge the traditional assumption that more frequent board meetings necessarily indicate stronger governance. Instead, the positive association with EM suggests that board activity may sometimes be reactive or symptomatic of underlying financial irregularities rather than proactive oversight. Regulatory authorities should go beyond mandating the number of board meetings and require

disclosures about meeting agendas, decisions taken, and attendance records, especially for companies flagged for financial irregularities. Furthermore, a rising trend in board meetings, especially during volatile earnings or restructuring periods, should be treated as a red flag. Investors and auditors should view such activity cautiously and investigate whether these meetings correlate with aggressive accounting practices.

There are several limitations to our study. First, we estimated EM by employing only the absolute value of *D.ACC*. It would be pertinent to analyze the impact of additional indicators of EM, such as income increasing and decreasing accruals, separately, accounting conservatism, earnings predictability, and persistence. Second, the study is restricted to one emerging economy only. Future research may consider other emerging economies that would help delve deeper into the functioning of CG systems. Each emerging economy has its unique characteristics and challenges; hence, research findings from a single emerging economy may have limited generalizability to other similar economies. Researchers can improve their findings by including multiple economies and enhancing the external validity. Third, we focused our study on only three aspects of board composition (i.e., *PBIN, TBSIZ*, and *TBM*). A deeper understanding of the function of governance mechanisms could be obtained by examining the effects of additional characteristics like qualification, gender diversity, and external connections. Fourth, future research can incorporate strategic alliance relationships' quality, duration, or strategic importance, which may enhance interpretive richness.

Despite such limitations, the study adds to the literature on the effectiveness of alternative governance and board composition in an emerging economy context. Future research may expand the current survey by incorporating additional characteristics of board composition, such as qualifications, gender diversity, and external connections, which can provide a deeper and more comprehensive understanding of how governance mechanisms function within organizations. Analyzing board members' qualifications allows researchers to assess the diversity of expertise within the board. Boards with members possessing a wide range of skills, including financial, industry-specific, legal, and operational knowledge, can be more effective in providing guidance and oversight. Further, gender-diverse boards can contribute to a more inclusive corporate culture. It can lead to diverse perspectives, fostering organizational innovation and creativity. Also, board members often have external connections and affiliations with other organizations. Studying these connections can reveal potential conflicts of interest and the influence these connections may have on board decisions and corporate strategy. Further research can also compare multiple emerging economies to uncover similarities and differences in CG mechanisms, regulatory frameworks, and their impact on corporate behavior. In addition, future research can explore multidimensional measures of alliance characteristics to better understand their governance potential. Also, distinguishing among individual audit firms and incorporating audit tenure would add analytical depth. These comparisons can provide valuable insights into what works and doesn't in CG systems, leading to more robust conclusions and policy recommendations.

The findings are relevant to regulators, policymakers, and investors in India and other allied emerging economies. Policymakers may benefit from insights that can assist them in designing and implementing more effective CG policies. Researchers may identify patterns, trends, and best practices that transcend national boundaries. Investors and stakeholders, including multinational corporations, may get valuable information from entities in emerging economies like India when making investment decisions or engaging with companies.

REFERENCES

Abdou, H. A., Ellelly, N. N., Elamer, A. A., Hussainey, K., & Yazdifar, H. (2021). Corporate governance and earnings management nexus: Evidence from the UK and Egypt using neural networks. *International Journal of Finance & Economics*, *26*(4), 6281–6311. https://doi.org/10.1002/ijfe.2120

Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. (2008). An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities. *Organization Science, 19*(3), 475–492. https://doi.org/10.1287/orsc.1070.0322

Ali, H., Amin, H. M. G., Mostafa, D., & Mohamed, E. K. A. (2022). Earnings management and investor protection during the COVID-19 pandemic: Evidence from G-12 countries. *Managerial Auditing Journal, 37*(7), 775–797. https://doi.org/10.1108/MAJ-07-2021-3232

Anglin, P., Edelstein, R., Gao, Y., & Tsang, D. (2013). What is the relationship between REIT governance and earnings management? *The Journal of Real Estate Finance and Economics*, *47*(3), 538–563. https://doi.org/10.1007/s11146-012-9367-y

Buertey, S., Sun, E.-J., Lee, J. S., & Hwang, J. (2020). Corporate social responsibility and earnings management: The moderating effect of corporate governance mechanisms. *Corporate Social Responsibility and Environmental Management, 27*(1), 256–271. https://doi.org/10.1002/csr.1803

Chatterjee, S., & Hadi, A. S. (2012). *Regression analysis by example* (5th ed.). Wiley.

Chen, G., Firth, M., Gao, D. N., & Rui, O. M. (2006). Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance, 12*(3), 424–448. https://doi.org/10.1016/j.jcorpfin.2005.09.002

Choi, J.-H., & Wong, T. J. (2007). Auditors' governance functions and legal environments: An international investigation. *Contemporary Accounting Research*, *24*(1), 13–46. https://doi.org/10.1506/X478-1075-4PW5-1501

Chouaibi, J., Harres, M., & Ben Brahim, N. (2018). The effect of board director's characteristics on real earnings management: Tunisian-listed firms. *Journal of the Knowledge Economy*, *9*(3), 999–1013. https://doi.org/10.1007/s13132-016-0387-3

Das, T. K. (2004). Time-span and risk of partner opportunism in strategic alliances. *Journal of Managerial Psychology, 19*(8), 744–759. https://doi.org/10.1108/02683940410568239

Das, T. K., & Rahman, N. (2010). Determinants of partner opportunism in strategic alliances: A conceptual framework. *Journal of Business and Psychology, 25*(1), 55–74. https://doi.org/10.1007/s10869-009-9132-2

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *The Academy of Management Review, 22*(1), 20–47. https://doi.org/10.2307/259223
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
Demirkan, S., & Demirkan, I. (2014). Implications of strategic alliances for earnings quality and capital market investors. *Journal of Business Research*, *67*(9), 1806–1816. https://doi.org/10.1016/j.jbusres.2013.12.009
Elghuweel, M. I., Ntim, C. G., Opong, K. K., & Avison, L. (2017). Corporate governance, Islamic governance and earnings management in Oman: A new empirical insights from a behavioural theoretical framework. *Journal of Accounting in Emerging Economies*, *7*(2), 190–224. https://doi.org/10.1108/JAEE-09-2015-0064
Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, *26*(2), 301–325. https://doi.org/10.1086/467037
Fan, J. P. H., & Wong, T. J. (2005). Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research*, *43*(1), 35–72. https://doi.org/10.1111/j.1475-679x.2004.00162.x
Feng, Z.-Y., & Huang, H.-W. (2021). Corporate governance and earnings management: A quantile regression approach. *International Journal of Finance & Economics*, *26*(4), 5056–5072. https://doi.org/10.1002/ijfe.2054
Gerged, A. M., Albitar, K., & Al-Haddad, L. (2021). Corporate environmental disclosure and earnings management — The moderating role of corporate governance structures. *International Journal of Finance & Economics*, *28*(3), 2789–2810. https://doi.org/10.1002/ijfe.2564
Gulati, R. (1995). Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *The Academy of Management Journal*, *38*(1), 85–112. https://www.jstor.org/stable/256729
Hambrick, D. C., Werder, A. V., & Zajac, E. J. (2008). New directions in corporate governance research. *Organization Science*, *19*(3), 381–385. https://doi.org/10.1287/orsc.1080.0361
Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X
Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, *29*(2), 193–228. https://doi.org/10.2307/2491047
Kang, E. (2008). Director interlocks and spillover effects of reputational penalties from financial reporting fraud. *Academy of Management Journal*, *51*(3), 537–555. https://doi.org/10.5465/amj.2008.32626007
Kapoor, N., & Goel, S. (2017). Board characteristics, firm profitability and earnings management: Evidence from India. *Australian Accounting Review*, *27*(2), 180–194. https://doi.org/10.1111/auar.12144
Katmon, N., & Al Farooque, O. (2017). Exploring the impact of internal corporate governance on the relation between disclosure quality and earnings management in the UK listed companies. *Journal of Business Ethics*, *142*(2), 345–367. https://doi.org/10.1007/s10551-015-2752-8
Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics, 39*(1), 163–197. https://doi.org/10.1016/j.jacceco.2004.11.002
Lemma, T., Negash, M., & Mlilo, M. (2013). *Determinants of earnings management: Evidence from around the world.* https://doi.org/10.2139/ssrn.2370926
Li, S., Park, S. H., & Bao, R. S. (2014). How much can we trust the financial report? Earnings management in emerging economies. *International Journal of Emerging Markets*, *9*(1), 33–53. https://doi.org/10.1108/IJoEM-09-2013-0144
Lin, Z., Liu, M., & Noronha, C. (2016). The impact of corporate governance on informative earnings management in the Chinese market. *Abacus*, *52*(3), 568–609. https://doi.org/10.1111/abac.12084
Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The Business Lawyer, 48*(1), 59–77. https://www.jstor.org/stable/40687360
Lorca, C., Sánchez-Ballesta, J. P., & García-Meca, E. (2011). Board effectiveness and cost of debt. *Journal of Business Ethics*, *100*(4), 613–631. https://doi.org/10.1007/s10551-010-0699-3
Mangala, D., & Dhanda, M. (2022). Earnings management and listing day performance of IPOs in India. *Journal of Accounting in Emerging Economies, 12*(5), 812–839. https://doi.org/10.1108/JAEE-01-2021-0032
North, D. C. (1990). *Institutions, institutional change, and economic performance*. Harvard University Press. https://doi.org/10.1017/CBO9780511808678
Obigbemi, I. F., Omolehinwa, E. O., Mukoro, D. O., Ben-Caleb, E., & Olusanmi, O. A. (2016). Earnings management and board structure: Evidence from Nigeria. *SAGE Open*, *6*(3). https://doi.org/10.1177/2158244016667992
Orazalin, N. (2020). Board gender diversity, corporate governance, and earnings management: Evidence from an emerging market. *Gender in Management: An International Journal, 35*(1), 37–60. https://doi.org/10.1108/GM-03-2018-0027
Pallant, J. (2007). *SPSS survival manual: A step-by-step guide to data analysis using SPSS for Windows* (3rd ed.). Open University Press.
Peng, M. W., & Heath, P. S. (1996). The growth of the firm in planned economies in transition: Institutions, organizations, and strategic choice. *The Academy of Management Review*, *21*(2), 492–528. https://doi.org/10.2307/258670
Poppo, L., & Zenger, T. (2002). Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal, 23*(8), 707–725. https://doi.org/10.1002/smj.249
Potharla, S., Bhattacharjee, K., & Iyer, V. (2021). Institutional ownership and earnings management: Evidence from India. *Cogent Economics & Finance*, *9*(1), Article 1902032. https://doi.org/10.1080/23322039.2021.1902032
Ramdani, D., & van Witteloostuijn, A. (2010). The impact of board independence and CEO duality on firm performance: A quantile regression analysis for Indonesia, Malaysia, South Korea and Thailand. *British Journal of Management*, *21*(3), 607–627. https://doi.org/10.1111/j.1467-8551.2010.00708.x
Sáenz González, J., & García-Meca, E. (2014). Does corporate governance influence earnings management in Latin American markets? *Journal of Business Ethics*, *121*(3), 419–440. https://doi.org/10.1007/s10551-013-1700-8
Sakawa, H., & Watanabel, N. (2021). Earnings quality and internal control in bank-dominated corporate governance. *Asian Business & Management, 20*(2), 188–220. https://doi.org/10.1057/s41291-019-00100-3

Saona, P., Muro, L., & Alvarado, M. (2020). How do the ownership structure and board of directors' features impact earnings management? The Spanish case. *Journal of International Financial Management & Accounting, 31*(1), 98–133. https://doi.org/10.1111/jifm.12114

Waweru, N. M., & Prot, N. P. (2018). Corporate governance compliance and accrual earnings management in Eastern Africa: Evidence from Kenya and Tanzania. *Managerial Auditing Journal*, *33*(2), 171–191. https://doi.org/10.1108/MAJ-09-2016-1438

Wu, S., Chen, C.-M., & Lee, P.-C. (2016). Independent directors and earnings management: The moderating effects of controlling shareholders and the divergence of cash-flow and control rights. *The North American Journal of Economics and Finance*, *35*, 153–165. https://doi.org/10.1016/j.najef.2015.10.007

Xie, B., Davidson, W. N., III, & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, *9*(3), 295–316. https://doi.org/10.1016/S0929-1199(02)00006-8

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