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Strengthening corporate governance: Military experience on boards and audit quality in earnings management

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Firm connections of board members have long been a focal point for economists in developed and developing countries. The connections through boards of directors can prove valuable, as connected directors provide support and essential knowledge about public policies to the firm. However, generalizing the effects of board connections on firm dynamics based on previous cross-country studies is challenging due to differing political scenarios and regulatory conditions across nations. Therefore, this study investigates the role of military connections earnings management in non-financial firms listed on the Pakistan Stock Exchange from 2010 to 2022. By focusing on accrual-based and real earnings management, the research demonstrates that military-affiliated directors significantly reduce earnings manipulation due to their discipline, ethical standards, and adherence to governance principles. This study concludes that the audit quality used as a moderating variable further strengthens the integrity of financial reporting, suggesting that the Big Four auditors further exhibit reductions in earning manipulations. Overall, this study contributes by extending upper echelons theory to show how military experience, characterized by discipline and monitoring, constrains both accrual-based and real earnings management. It further highlights the interaction of military directors with external audit quality, forming a dual safeguard against manipulation. Finally, by focusing on Pakistan, the study enriches understanding of governance in emerging markets where institutions are weaker and monitoring roles of directors are crucial.

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Introduction

Earnings management has received increased attention in recent years from various stakeholders, including legislators, investors, practitioners, and academics. This rising interest arises from the importance of earnings in boosting investor trust and achieving business goals (Eugster and Wagner, 2020). Earnings are an important part of financial reporting since they show the trustworthiness and correctness of financial accounts (Eugster and Wagner, 2020). Moreover, they provide perception into management incentives and motivations, company willingness to take risks, disclosing how these factors affect financial reporting practices and future profits of the firms (Mamatzakis, 2024). Managers and executives may exaggerate earnings to enrich their bargaining power and support organizational goals, affecting shareholders' perceptions and decisions. Corporate governance plays a critical role in curbing earnings management practices within firms. Firms' earnings management varies depending on the specific methods used to measure earnings management and the level of scrutiny and oversight involved. The agency theory emphasizes that corporate boards protect shareholders' interests through effective monitoring (Fama and Jensen, 1983). However, the board's ability to fulfil these responsibilities significantly depends on knowledge, prior experience, and expertise. Strong corporate governance with an efficient board of directors enhances oversight of financial practices, which can prevent managers and executives from engaging in aggressive earnings management activities (Zhang et al., 2024). The board of directors, with their diverse professional backgrounds, past experiences, and personal traits, can have different effects on firm outcomes, as they bring different unique skill sets and perspectives that can enhance or impair the decision-making and outcomes of firms (Bawuah, 2024). Recent studies highlight that connections through the board of directors are standard in extracting short-term and long-term firm outcomes (Tiwari et al., 2024).

However, Previous studies examine board diversity and political connections (Akcigit and Ates, 2023; Goel and Kapoor, 2022; Karim et al., 2023) nevertheless, the need to study director's military experience and how that can influence the earnings management is still underexplored especially among the emerging market such as Pakistan. The literature also emphasizes the role of military ties in risk taking (Benmelech and Frydman, 2015) while not addressing how military ties might govern financial reporting. Particularly, firms' connections through military experienced directors bring unique talents and abilities that influence strategic decisions (Harymawan et al., 2024). Therefore, this study fills this gap by assessing (1) How do military-connected boards affect accrual and real earnings management? (2) the role of audit quality in strengthening the above relationship?

Military-trained individuals are often characterized by disciplined personal decision-making, ethical behavior, and loyalty, reflecting the interest of shareholders, which enhances board effectiveness (Benmelech and Frydman, 2015). These behavioral attributes, shaped by military service, may significantly influence corporate governance practices, particularly in earnings reporting and compliance with financial regulations (Luo and Wu, 2017). This research aims to fill this gap by exploring how directors with military experience impact the quality of earnings in Pakistan's socio-political and economic settings. In contrast to the environments of developed countries, Pakistan's political structure is marked by ongoing instability and notable military involvement (P Junejo, 2024). The military has served as both an entity and a significant player in the economy, influencing the commercial environments of the nation (Zaidi, 2010). In light of this scenario mentioned earlier in the discussion, this research delves into

whether the involvement of board members in service contributes to upholding standards for reporting and ethical practices among businesses in Pakistan. The military focus on adherence to rules and regulations as moral principles presents a strong rationale (Koch-Bayram and Wernicke, 2018). These core values learned during tenure might influence the conduct of former military personnel serving as directors, shaping their governance approach over time. This study suggests that companies led by directors with experience are less inclined to manipulate earnings for their advantage. Especially looking into the behavioral characteristics influenced by military backgrounds and how they affect financial reporting outcomes.

This study offers insights and contributions to the existing literature on corporate governance and earnings management. First, it extends the upper echelons theory by introducing military service experience as a novel board characteristic that shapes financial reporting outcomes. Prior research has associated military backgrounds with conservatism, investment choices, and merger outcomes (Xu et al., 2025). This study provides new evidence that military-affiliated directors, characterized by discipline, ethical conduct, and monitoring orientation, act as effective internal governance mechanisms that constrain both accrual-based and real earnings management thus adds to the existing literature on earnings quality determinants, including gender diversity, social capital, and institutional ownership (Kangea, 2023). Second, it advances governance research by uncovering how audit quality interacts with military affiliation to reduce earnings manipulation. While prior studies often treat internal and external governance as substitutes, our findings show that Big Four audits strengthen, rather than replace, the monitoring role of military-affiliated directors. This reveals a dual safeguard effect, internal (military discipline) and external (audit quality) mechanisms jointly enhance financial reporting quality. Third, the study contributes contextual insights by focusing on Pakistan, an emerging market with weaker institutional enforcement. In such environments, informal governance mechanisms like military affiliation play a pivotal role in complementing underdeveloped formal institutions. By documenting this dynamic, the study enriches corporate governance literature and provides practical implications for regulators and firms operating in institutional settings where monitoring is otherwise limited.

Theoretical Foundation, Literature review and hypothesis development

Theoretical Foundations. This study is anchored in two primary theoretical frameworks: Agency Theory (Meckling and Jensen, 1976) and Upper Echelons Theory (Hambrick & Mason, 1984). These theories provide a conceptual foundation for understanding how military-connected directors influence earnings management and how audit quality moderates this relationship. Agency theory posits that conflicts of interest arise between principals (shareholders) and agents (managers) due to information asymmetry and divergent goals. Managers may engage in earnings management to maximize personal benefits, such as bonuses or job security, at the expense of shareholders. Effective corporate governance mechanisms, including board oversight and external audits, mitigate these conflicts by aligning incentives and enhancing transparency (Fama and Jensen, 1983). Military-affiliated directors, with their disciplined and ethical training, are likely to act as strong internal monitors, reducing opportunistic earnings manipulation. This aligns with the theory's emphasis on governance structures that curb agency costs. Upper Echelons Theory suggests that executives' backgrounds, experiences, and values shape their strategic decisions and organizational

outcomes. Military service instills traits like discipline, risk aversion, and adherence to rules (Benmelech and Frydman, 2015), which may translate into conservative financial reporting. This study extends the theory by demonstrating how military backgrounds uniquely influence financial reporting integrity, particularly in emerging markets where formal governance mechanisms are weaker.

Literature review and hypothesis development. The integrity and reliability of financial reporting have been of much interest to researchers, with numerous studies examining various aspects that may affect earnings management. The current body of literature identifies the internal and external factors affecting earnings quality. For example, earnings management in non-financial industries is associated with social trust (Sánchez-Ballesta and Yagüe, 2022) market concentration (El Diri et al., 2020), investor rights (Chen et al., 2020) and media coverage (Sánchez-Ballesta and Yagüe, 2022). Environmental conditions also play a significant role and force companies to manage earnings accordingly (Ding et al., 2021). In countries with relatively weak legal systems and high media attention, social trust is negatively associated with earnings management, especially in Chinese non-financial firms (Cao et al., 2022). On the other hand, firms with substantial investor rights, deep institutional ownership and active financial analysts provide less opportunity for earnings management. In the context of macro factors affecting earning quality, (Yung and Root, 2019) used data from 18 countries (2001-2014) to show that firms are more likely to manage earnings when there is policy uncertainty. Zhang et al. (Chen et al.) discovered that external financing dependency has a positive relationship with earnings management.

The internal factors affect the earnings quality to a great extent. These internal factors include corporate governance, leadership characteristics, and firm policies, key determinants of earnings quality. Previous research works have focused on examining corporate governance structures (El Diri et al., 2020), board characteristics (Akcigit and Ates, 2023; Goel and Kapoor, 2022; Karim et al., 2023), equity incentives (Hwang and Lee, 2012), CEO characteristics (Talha et al., 2024) and CSR (Hickman et al., 2021). Organizations that embrace CSR practices have better accrual quality and less earnings management practices (Palacios-Manzano et al., 2021). However, (Hickman et al., 2021) established that CSR mandates reduce earnings management to some extent but have no significant impact on firms that have already embarked on CSR reporting. In addition, leadership characteristics such as religion and gender affect earnings management. For example, religious CEOs are less likely to manage earnings using accurate and accruals report (Talha et al., 2024) they also found that gender diversity among joint auditors is positively related to earnings management. Although most of the existing literature concentrates on the conventional mechanisms of corporate governance, little attention has been paid to the impact of military connections on compliance with financial reporting principles.

(Akerlof and Kranton, 2005) argue that military training instills behavioral expectations and values like trustworthiness and self-control. Ex-military directors often carry these values into their professional lives, adopting ethical practices and resisting accounting manipulations (Nguyen et al., 2020). Additionally, military backgrounds may encourage data-driven and principle-based decision-making, potentially reducing the likelihood of financial misconduct. The military employs a structured encouragement system to boost adherence to expected behaviors and discourage deviations from established norms (Jackson et al., 2012). Since military tune-up occurs early in an individual's life

and precedes many other influential life events, the associated training and behavioral prescriptions are pivotal in affecting personalities and instilling values like trustworthiness and self-control (Maclean and Elder Jr, 2007). These qualities, in turn, shape individuals' subsequent behavior and professional lives. Notably, the military experience reinforces authentic communication and reliable leadership throughout ex-military directors' careers, guiding them to establish ethical principles based on data-driven insights and facts.

However, the effect of military connections on financial reporting has not been conclusive. Military firms in Indonesia were found to manage earnings more often and are less likely to engage the services of Big Four auditors, which points to possible weaknesses in the audit process (Harymawan et al., 2024). Similarly, Chinese firms governed by military personnel show an increased propensity to manage earnings, especially those that are state-owned and have weak internal control systems (Mohuba, 2023). These findings reveal the governance risks associated with military ties, particularly in contexts with insufficient supervision mechanisms. Conversely, US CEOs with military experience have been found to engage in less financial fraud, suggesting that military training enhances financial accountability (Koch-Bayram and Wernicke, 2018). The military connection also affects auditor selection and oversight. Similarly, (Abdul Wahab et al., 2024) discovered that companies with ex-military commissioners preferred industry-specialist auditors, which enhanced financial reporting quality. However, some studies have revealed that military connection negatively affects financial statement readability, thus making financial statements less transparent (Lee and Azis, 2024). From previous literature, it is evident that military influence on financial governance has positive and negative aspects. This duality highlights the complexity of military influence on financial governance, balancing ethical strengths with communication challenges. The role of military connections in financial reporting integrity presents a nuanced picture. While military backgrounds instill discipline and ethical values, leading to regulatory compliance and reduced financial misconduct in some contexts, they also correlate with increased earnings management and transparency issues in others. However, generalizing the effects of board connections on firm dynamics based on previous cross-country studies is challenging due to differing political scenarios and regulatory conditions across nations.

Therefore, this study investigates the role of military connections in enhancing financial reporting integrity in non-financial firms listed on the Pakistan Stock Exchange. This study builds a hypothesis with the expectation that the ethical and disciplined characteristics of military-connected directors will discourage financial manipulation, ultimately contributing to higher earnings quality and improved corporate governance. Recent empirical studies and military standards suggest that ex-service military personnel are less inclined toward unethical and dishonest behaviors due to their training and cultural values (Quan et al., 2023). The study hypothesizes that directors with military backgrounds, reflecting moral values, are less prone to engaging in accounting misuses and inclined to opt for more ethical practices, thereby maintaining high earnings quality. Therefore, based on these discussions, we formulate our hypothesis as follows:

Hypothesis-1: Military connections are negatively related to both real and accrual-based earnings management.

Moderating role of audit quality. The existing body of literature indicates a common perception regarding Big Four auditors, who are known to provide audit services of high quality and protect

their reputation. The relationship between audit quality and earnings management is multifaceted, particularly within the broader context of corporate governance. High audit quality is generally associated with a reduction in earnings management practices, as it enhances the accuracy of financial reporting and improves the detection of fraudulent activities. However, the effectiveness of audit quality is not universal. It is shaped by various contextual factors, including regulatory frameworks and the strength of corporate governance mechanisms (Baig et al., 2024). Some studies suggest that executives with military backgrounds enhance audit quality by reducing earnings management, while others indicate that such executives may increase earnings manipulation under certain conditions (Lai et al., 2023; Xu et al., 2025). Firms led by ex-military executives often exhibit lower levels of accrual-based earnings management, suggesting a positive influence on audit quality (Li et al., 2024). However, military managers may engage in real earnings management, which is perceived as less risky, thereby complicating the relationship with audit quality (Li et al., 2024). These findings underscore the need for a nuanced understanding of the factors that influence audit quality and earnings management, particularly in diverse organizational and institutional settings.

Numerous valid arguments support the assertion that the Big Four are well-equipped to consistently uphold high audit quality standards worldwide. Moreover, the Big Four firms adopt consistent team training, expertise, and identical audit procedures. This uniformity decreases the probability of endorsing misreporting and offers more substantial incentives for addressing legal concerns (Van Tendeloo and Vanstraelen, 2008). The relationship between military connections and earnings management (H1) is rooted in the ethical and disciplined behavior instilled in military-trained directors, which reduces financial misreporting. However, the effectiveness of internal governance mechanisms (such as military-connected boards) can be further reinforced by external monitoring mechanisms, particularly **audit quality**. Agency theory suggests that high-quality audits mitigate agency conflicts by enhancing transparency and reducing information asymmetry between managers and stakeholders (Jensen & Meckling, 1976). Military-connected directors may already discourage earnings manipulation, but external auditors provide an additional layer of scrutiny, ensuring compliance with accounting standards. Firms audited by Big Four auditors signal credibility to investors (He et al., 2022). Military connections may enhance governance, but audit quality acts as a verifiable signal that financial statements are reliable, further deterring earnings management. The interaction between military connections and audit quality can be understood through two mechanisms: Military directors bring internal discipline, while Big Four auditors enforce external accountability. Prior research shows that Big Four auditors significantly reduce accrual-based and real earnings management (Tantawy and Moussa, 2023). In emerging markets, where institutional oversight is weak, high-quality audits play an even more critical role (Fan & Wong, 2005). Studies find that firms with military-linked directors exhibit lower financial misconduct (Koch-Bayram & Wernicke, 2018). However, the effectiveness of military governance may depend on external checks. (Guedhami et al., 2014) shows that audit quality enhances the credibility of financial reports, and (Fan and Wong, 2005) found that Big Four auditors play a similar role in emerging markets. Building on this, we propose that audit quality helps prevent earnings management more effectively in military-connected firms, particularly in countries with weaker institutional systems. The hypothesis of this study aligns with the mentioned studies, which found that military-affiliated firms audited by Big Four firms are less likely to engage in earnings management, especially in environments with poor legal and

Table 1 Screening Steps.

Screening Step	Firms Excluded	Remaining Sample
Initial PSX listings	0	520
Financial firms	143	377
Missing data and delisting of firms 2010-2022	137	240

investor protections. Based on this, we expect Big Four auditors to reduce earnings manipulation in military-connected firms. Thus, our second hypothesis is as follows:

Hypothesis-2: Audit quality further strengthens the relationship between military connections and earnings management.

Research Methodology

Data sources and sample selection. In this study, data was gathered through various approaches and methods. This study collected data manually from the annual reports of companies listed on the Pakistan Stock Exchange (PSX) and from internationally recognized databases. Bureau Van Dijk (BVD) ORBIS database is used to extract financial information of firms used in this study. However, the ORBIS database is also widely used to obtain enterprise data (Martin et al., 2014; Kwon et al., 2016; Faria & Andersen, 2017). First, we chose active but non-financial companies, thus excluding banks and insurance companies because their regulatory governance and requirements for disclosure differ. These criteria were then used to determine our study sample, excluding firms with unavailable information. As no formal database exists on directors' affiliations and past experiences in listed companies in Pakistan, we collected corporate governance data from annual reports on the Pakistan Stock Exchange and respective company websites, as well as military connections gathered through official websites and examined individual directors' military affiliations by scanning annual reports for military designations and foundations. Current or retired military personnel served as board members and identified military connections. The search also used military designations (Capt., Maj., Col., and Gen.) due to the symbolic use of retired or serving military officers. Table 1 provides the detailed screening steps of firm selections during the study period and Table 2 provides the detailed definitions and measurement of variables used in the study.

Model specification. Recent studies have emphasized the significance of networks and political affiliations, particularly in emerging markets where formal institutions offer limited protection for investors and business transactions. It has been argued that military or political ties may lead to rent-seeking behaviors, especially in economies with weak institutional frameworks to regulate those in positions of power (Feng and Johansson, 2014; Liu et al., 2013; Zhou, 2013). However, this study follows the previous studies (Belghitar et al., 2019; Guedhami et al., 2014; Habib et al., 2017; Kim and Sohn, 2013) by investigating the association between military affiliations and earnings management. Initially, a probit model is employed to assess the prospect of a firm's association with the military.

$$(MCON_{it}) = a + BX_{it} + \gamma Z_{it} + \varphi_t + \omega_j + \varepsilon_{it} \dots \quad (1)$$

The above equation shows that for any firm *i* and year *t*. MCON is equal to one if the firm has a military connection in a specific year; otherwise, it is zero. X_{it} contains the explanatory variables employed in the subsequent analysis. The supplementary variables predict the likelihood of a firm having military ties. Z_{it} consists of two instruments commonly used in previous

Table 2 Variables definition.

Abbreviation	Full Name	Description	Source of data
DACC	Discretionary Accruals	Absolute value of the residuals from the model of Jones (1991)	Author calculation based on Eq. 6.
RM-1	Real Earnings Management	RM-1 = APRO- ADEX	Author calculation based on Eq. 11
RM-2	Real Earnings Management	RM-2= (-ACFO)- ADEX	Author calculation based on Eq. 12
ACFO	Abnormal cash flow from operation	ACFO is estimated based on the method of Jones (1991) residual of Equation 6.8	Author calculation based on Eq. 8
APRO	Abnormal Production Cost	APRO is estimated based on the method of Jones (1991) residual of equation 6.9	Author calculation based on Eq. 9
ADEX	Abnormal discretionary expenses	ADEX is estimated based on method of Jones (1991) residuals of equation 6.10	Author calculation based on Eq. 10
MCON	Military connection	1 if a firm in a given year has at least one ex-military/former-military director on the board, otherwise zero	Annual Reports
RMD	Military percentage	Ratio of military directors to non-military directors	Annual Reports
FSZ	Firm Size	The natural logarithm of total asset at the end of the year	ORBIS
LEV	Leverage	Total liabilities divided by total assets at the end of the year	ORBIS
FTY	Firm type	The industry type in which the company is listed	Based on 2-digit codes of NAICS 2022
FAG	Firm Age	Number of years since Incorporation of the Firm	Annual reports
CAP	Capital intensity	Ratio of net property, plant and equipment to total Assets	ORBIS
AUQ	Audit quality	1 if firm audited by big four otherwise 0	Annual Reports

Source: Author calculation.

research: the proportion of associated firms in the year (Guedhami et al., 2014; Habib et al., 2017; Kim and Sohn, 2013) and business uncertainty (Xu et al., 2016). These instruments are justified for employment because of large businesses in heavily regulated industries. The exclusion of these suggested parameters from the subsequent model is based on the absence of prior evidence of their direct influence on earnings management (Agrawal and Knoeber, 2001). Furthermore, we examine the link concerning military connections and quality of earnings by analyzing the regression indicators on the inverse Mills ratio (IMR) derived from the initial stage, alongside other control variables. This regression model is represented as follows:

$$ERM_{it} = \beta_0 + \beta_1 MCON_{it} + \beta_2 FS_{it} + \beta_4 LEV_{it} + \beta_5 FT_{it} + \beta_6 FAG_{it} + \beta_7 CAPI_{it} + \varphi_t + \omega_j + \varepsilon_{it} \dots \dots \dots (2)$$

Where ERM_{it} is earnings management, $MCON_{it}$ is military connections, FS_{it} is firm size, LEV_{it} is leverage, FT_{it} is firm type, FAG_{it} firm age and $CAPI_{it}$ is capital intensity. φ_t and ω_j denote time effect and firm specific effect. ε_{it} is the error term which are consider independently and identically distributed with zero mean and variance constant. Furthermore, moderating effect of audit quality are estimate using the following regression model.

$$ERM_{it} = \beta_0 + \beta_1 MCON_{it} + \beta_3 (MCOM * AQ)_{it} + \beta_2 FS_{it} + \beta_4 LEV_{it} + \beta_5 FT_{it} + \beta_6 FAG_{it} + \beta_7 CAPI_{it} + \varphi_t + \omega_j + \varepsilon_{it} \dots \dots \dots (3)$$

Where $MCOM * AQ$ represent the moderating effect of audit quality and product competitions on earnings management.

Measurement of key variables. Companies may engage in either accrual-based earnings management, real earnings management, or a combination of both to influence their financial reporting. While accrual-based management is often simpler to detect, real earnings management involves more extensive operational decisions, making it harder to identify. It typically affects cash flows and firm value over a short period (Gunny, 2010; Kim and Sohn, 2013). This study incorporates both types of earnings management to evaluate how military affiliations influence corporate financial manipulation strategies.

Accruals based-earnings management measure

This study, in alignment with previously conducted studies of (Jones, 1991; Liu and Lu, 2007). Accrual based earnings management measured as the absolute value of discretionary accruals.

$$ACC_{it} = \frac{NI_{it} - CFO_{it}}{TA_{it}} \dots \dots (4)$$

Where ACC_{it} signifies total accruals is equivalent to subtraction of total income of firm (NI_{it}) minus cash generated from operations (CFO_{it}) divided by total assets of firm in the year (TA_{it}). We then perform an ordinary least squares regression by using the equation below. We designate the residuals from regression as discretionary accruals.

$$\frac{ACC_{it}}{TA_{it-1}} = \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \varepsilon_{it} \dots \dots (5)$$

$$|DACC| = a_0 + a_2 \Delta REV_{it} + a_3 PPE_{it} + \varepsilon_{it} \dots \dots \dots (6)$$

Where $|DACC|$ represent absolute discretionary accruals, ΔREV_{it} is the percentage change in total revenue of firm in year and PPE_{it} signifies the firm fixed assets.

Real earnings management measure

This study evaluates real earnings management by investigating three different methods of altering actual operational activities. Specifically, the focus is on abnormal cash flow from operations, abnormal production costs, and abnormal discretionary expenses. Studies to date have used the above proxies for measuring earnings management in firms based on the assumptions that they present a good mirror of actual practices of earnings management (Achleitner et al., 2014; Braam et al., 2015; Cohen and Zarowin, 2010; Zang, 2012). Using a framework initially introduced by (Dechow et al., 1998) and later refined by (Roychowdhury, 2006) we estimate the expected levels of cash flow from operations, production costs, and discretionary

expenses for each company using the following models

$$\frac{CFO_{it}}{TA_{it-1}} = \beta_0 + \beta_1 \left(\frac{1}{TA_{it-1}} \right) + \beta_2 \left(\frac{Sales_{it}}{TA_{it-1}} \right) + \beta_3 \left(\frac{\Delta Sales_{it}}{TA_{it-1}} \right) + \epsilon_{it} \dots \dots \quad (7)$$

$$\begin{aligned} \frac{PROD_{it}}{TA_{it-1}} = & \beta_0 + \beta_1 \left(\frac{1}{TA_{it-1}} \right) + \beta_2 \left(\frac{Sales_{it}}{TA_{it-1}} \right) + \beta_3 \left(\frac{\Delta Sales_{it}}{TA_{it-1}} \right) \\ & + \beta_4 \left(\frac{\Delta Sales_{it-1}}{TA_{it-1}} \right) + \epsilon_{it} \dots \dots \end{aligned} \quad (8)$$

$$\frac{DISEXP_{it}}{TA_{it-1}} = \beta_0 + \beta_1 \left(\frac{1}{TA_{it-1}} \right) + \beta_2 \left(\frac{Sales_{it-1}}{TA_{it-1}} \right) + \epsilon_{it} \dots \dots \quad (9)$$

In the equation above i and t demonstrate firm and year, In the equations presented, each variable has a specific role in estimating the usual level of cash flows from operations, production costs, and discretionary expenses for individual firms. In Eq. (8), CFO represents cash generated from a firm’s operations, normalized by total assets. Equation (9) calculates PROD, which refers to production costs, incorporating the cost of goods sold. Lastly, Eq. (10) models DISEXP, representing discretionary expenditures, such as advertising, selling, and administrative expenses, also scaled by total assets. The equations allow for coefficients to vary across different time periods when applying cross-sectional analysis. The terms reflect abnormal values, where higher-than-expected cash flow levels, production costs, or discretionary expenses signify deviations from typical operations. Companies that engage more extensively in real earnings manipulation often demonstrate greater abnormalities in CFO and discretionary expenses, along with increased production costs. Prior studies on earnings management (Achleitner et al., 2014; Braam et al., 2015; Cohen and Zarowin, 2010; Zang, 2012), we combine the three different proxies, which reflect of earnings individually to construct an aggregate measure. These aggregate indicators help to capture the total impact of real activities-based earnings management strategies.

$$RM - 1_{it} = (APROD)_{it} - (ASISEXP)_{it} \dots \dots \quad (10)$$

$$RM - 2_{it} = (-ACFO)_{it} - (ASISEXP)_{it} \dots \dots \quad (11)$$

variability measures to provide insight into the data’s structure. For instance, the DACC, a proxy for accrual-based earnings manipulation, has a mean value of 1.299, indicating moderate variability, with a standard deviation of 0.528. The smallest observed value is 1.224, and the largest reaches 3.267%. Two metrics for Real Earnings Management, REM-1 and REM-2, present mean values of -0.212 and -0.606, respectively, along with standard deviations of 0.446 and 0.466, signaling a pattern of negative skewness. The ACFO exhibits a mean of 0.094 and a deviation of 0.191, with extremes between -0.971 and 0.998. Meanwhile, APROD and ASISEXP yields are 0.363 and 0.563, with modest dispersion. The Independent variables MCON and RMI reflect lower mean values of 0.259 and 0.160, pointing to minor linkages within firms’ networks.

Pairwise correlation analysis. The relationship among various variables reveals intriguing patterns. The results, as outlined in Table 4, highlight the pairwise correlations between key factors, along with their corresponding coefficients in the correlation matrix. Discretionary Accruals (DACC) correlate negatively with Military Connections (MCON and RMD), with coefficients of -0.090 and -0.090, respectively. This observation supports that firms with military associations adopt more conservative accounting practices, as indicated by a reduced reliance on discretionary accruals in organizations with stronger military ties. Firm Size (FSZ) also demonstrates a negative association with DACC, with a coefficient of -0.075, implying that larger firms manage earnings less aggressively. Conversely, leverage (LEV) positively correlates with DACC, with a coefficient of 0.088, suggesting that companies with higher leverage ratios are more likely to exhibit increased discretionary accruals. The firm type negatively correlates with DACC, with a coefficient of -0.036. At the same time, Audit Quality (AUQ) presents a weak inverse relationship, as reflected by a coefficient of -0.009, hinting that superior audit quality may help mitigate discretionary accruals. Actual earnings management indicators (REM_1 and REM_2) are negatively correlated with DACC, with coefficients of -0.941 and -0.787, respectively, reinforcing the view that firms employing real earnings management strategies tend to report lower discretionary accruals. Additionally, the Abnormal Level of Cash Flow from Operations (ACFO) shows a negative correlation with DACC, marked by a coefficient of -0.575, indicating that firms with elevated abnormal cash flows are associated with lower discretionary accruals. Similar patterns emerge for the Abnormal Level of Production Cost (APROD) and the Abnormal Discretionary Expenses.

Empirical Results

Descriptive. Table 3 offers a statistical overview of the variables analyzed in this research. It highlights key central tendency and

Table 3 Descriptive statistics.

	Mean	SD	Min	Max	CV	Skewness	Kurtosis	IQR
DACC	1.299	0.528	1.224	3.267	0.406	0.326	4.122	0.691
REM_1	-0.212	0.446	-1.879	1.832	-2.098	0.255	3.811	0.636
REM_2	-0.606	0.466	-1.855	1.364	-0.770	0.853	3.951	0.568
ACFO	0.094	0.191	0.046	0.115	2.040	0.010	9.704	0.127
APRO	0.363	0.329	0.361	0.477	0.906	0.084	3.485	0.486
ADEX	0.563	0.340	0.335	0.994	0.604	1.485	5.374	0.374
MCON	0.259	0.438	0.000	1.000	1.693	1.102	2.215	1.000
RMD	0.160	0.273	0.000	1.000	1.708	1.167	2.480	0.571
FSZ	15.453	1.962	1.099	20.962	0.127	-0.229	3.954	2.695
LEV	0.843	1.140	0.004	9.822	1.353	5.042	31.775	0.360
FTY	7.413	2.072	1.000	15.000	0.280	1.915	8.855	0.000
FAG	39.021	13.775	25.000	63.000	0.353	0.576	1.841	26.000
CAP	0.609	0.897	0.000	7.833	1.473	5.719	38.042	0.354
AUQ	0.444	0.497	0.000	1.000	1.119	0.224	1.050	1.000

Source: Author calculation.

Table 4 Pairwise correlation.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) DACC	1													
(2) RM-1	-0.2805*	1												
(3) RM-2	-0.2831*	0.6369*	1											
(4) ACFO	0.1994*	-0.2631*	-0.7181*	1										
(5) APRO	-0.1000*	0.6558*	-0.1022*	0.0789*	1									
(6) ADEX	0.628*	-0.6960*	-0.9203*	0.3887*	-0.0910*	1								
(7) MCON	-0.1090*	-0.0992*	-0.1223*	-0.0210*	-0.0403*	-0.1759*	1							
(8) RMD	-0.1076*	-0.1023*	-0.1196*	-0.0135*	-0.0348*	-0.1756*	0.9914*	1						
(9) FSZ	0.4293*	0.0740*	0.0603*	0.0467*	0.0066	0.1047*	0.1640*	0.1659*	1					
(10) LEV	0.3652*	-0.0812*	-0.0670*	-0.0724*	0.0053	0.1113*	0.0575*	0.0638*	-0.3580*	1				
(11) FTY	0.0524*	0.0384*	0.0285*	0.0099	0.0200*	0.1016	0.1087*	0.0313*	0.1087*	0.011	1			
(12) FAG	-0.0468*	-0.0475*	-0.0112	0.0026	0.0380*	-0.0266*	-0.0530*	-0.0596*	-0.1362*	-0.0292*	-0.0463*	1		
(13) CAP	0.2327*	0.0225*	0.0018	0.0535*	0.0932*	0.0336*	-0.0675*	-0.0719*	-0.3259*	0.6911*	0.0397*	0.0169*	1	
(14) AUQ	-0.1026*	0.0027	-0.1004*	-0.0544*	0.0047	0.0358*	0.0066	0.0044	0.0265*	-0.0770*	-0.0145*	0.0169*	-0.0753*	1

Military connections and earnings management. We employ the Generalized Method of Moments (GMM) to address endogeneity concerns (e.g., reverse causality between military connections and EM) and firm-level heterogeneity (Roodman, 2009). GMM is preferred over OLS for dynamic panel data with limited time periods. Table 5 presents the estimated results of the system GMM approach; the analysis investigates the relationship between military connections and earnings management, encompassing both accrual-based and real earnings management strategies. The key independent variable of interest is the Military Board (MCON), which is crucial in understanding how military affiliations influence financial reporting practices. In accrual-based earnings management, the coefficient for independent variables MCON with absolute discretionary accruals is -0.3345, indicating a statistically significant negative effect at the 5% level. This implies that firms with military connections exhibit lower absolute discretionary accruals, suggesting a potential governance role in curbing opportunistic managerial behavior. Similarly, real earnings management has a negative and significant effect on RM-1 with the coefficients of -0.1666, and RM_2 is -0.2155, indicating a statistically significant adverse impact at the 1% level. This reinforces the idea that military-connected firms tend to exhibit lower aggregate real earnings management levels, supporting effective corporate governance. The coefficient for MCON in the context of abnormal cash flow from operations (ACFO) is -0.0245, though statistically insignificant. Similarly, the coefficient for MCON with abnormal discretionary expenses (ADEX) is -0.1909 and significant at the 1% level. Since lower discretionary expenses signal greater earnings management, this suggests that military directors are linked to higher earnings manipulation through reduced discretionary spending. Conversely, the coefficient for MCON on abnormal production costs (APROD) is -0.0344, significant at the 5% level. Because higher abnormal production costs reflect more manipulation, the negative coefficient here indicates that military-connected firms exhibit less production-related earnings management. Overall, the results suggest that military affiliations reduce earnings management through production cost channels, but may simultaneously increase manipulation through operating cash flow and discretionary expenses.

Firm size has a highly significant and positive coefficient of 0.2746 with absolute discretionary accruals, indicating that larger firms tend to have higher discretionary accruals. This trend continues in real earnings management with significant positive coefficients for RM_1 and RM_2, suggesting that larger firms are associated with increased aggregate real earnings management activities. The study's findings validate our hypothesis, which indicates that experienced military directors are more obedient and inclined to have ethical behavior due to their prior careers in the military. Therefore, they are more effective as the role of guardians or supervisors in progressing in earning credibility and enhancing earnings management. The results are consistent with previous findings; the results align with prior research, indicating that firm military connections are linked to reduced accrual and real earnings management. The findings support the claim that having military personnel as board members decreases earnings management compared to the perception that they encourage earnings management (Khalil et al., 2022; Batta et al., 2014; Li et al., 2023).

Moderating role of audit quality. The study's second goal is to investigate whether the effect of military connections on accrual and real earnings management is moderated by external auditing quality. It appears that further intensification of the negative relationship between military directors and earnings management

Table 5 Military connection and earnings management: GMM Test results.

	Accrual Earnings	Real Earnings Management				
	DACC	RM-1	RM-2	ACFO	APRO	ADEX
MCON β_1	-0.3345** (0.1820)	-0.1666*** (0.0257)	-0.2155*** (0.0203)	-0.0245 (0.0197)	-0.0344** (0.0179)	-0.1909*** (0.0188)
FSZ	0.2746*** (0.0748)	0.1088*** (0.0388)	0.1183*** (0.0306)	0.0123 (0.0146)	0.0079 (0.0288)	0.1060*** (0.0284)
LEV	0.6597*** (0.2095)	-0.1357*** (0.0296)	-0.1360*** (0.0233)	0.0169 (0.0111)	-0.0106 (0.0230)	0.1191*** (0.0217)
FTY	-0.0557 (0.0367)	0.0199*** (0.0052)	0.0172*** (0.0041)	-0.0522*** (0.0195)	0.0196*** (0.0039)	-0.0167*** (0.0038)
FAG	-0.0133 (0.0232)	0.0765*** (0.0328)	-0.0602*** (0.0258)	0.0635*** (0.0123)	0.0756*** (0.0258)	-0.0332*** (0.0124)
CAP	0.6493** (0.3568)	-0.0237 (0.0505)	-0.0548 (0.0397)	0.0378*** (0.0190)	0.0403 (0.0263)	0.0170 (0.0369)
Constant	1.6587*** (0.1609)	1.2710*** (0.5745)	1.1723*** (0.4525)	-0.2878 (0.2158)	0.2027 (0.4492)	-0.8845*** (0.4199)
Obs.	2640	2640	2640	2640	2640	2640
Years	13	13	13	13	13	13
No of Firms	240	240	240	240	240	240
Firm-FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	No
AR (1)	-4.960 (0.050) **	-9.730 (0.000) ***	-2.310 (0.000) ***	-5.340 (0.000) ***	-3.502 (0.000) ***	-9.230 (0.015) ***
AR (2)	6.950 (0.340)	4.750 (0.215)	6.440 (0.660)	7.480 (0.630)	8.150 (0.270)	7.460 (0.752)
Hansen Test	2.660 (0.988)	3.250 (0.517)	8.240 (0.781)	6.020 (0.806)	8.730 (0.120)	5.820 (0.639)
Wald Test	10.85 (0.009) ***	22.01 (0.000) ***	18.24 (0.000) ***	16.06 (0.000) ***	17.73 (0.000) ***	14.33 (0.000) ***

Table 5 presents the GMM system approach results of the impact of military affiliations on DACC are presented in column 1, RM-1 in column 2, and RM-2 in column 3. Finally, the last three columns are devoted to the RM metric on the individual level. Significance levels: ***, **, * (1%, 5%, 10%).

activities can be achieved through external auditing. Therefore, the choice of audit quality as a moderating variable is critical to the critical role that high-quality audits play in increasing financial reporting reliability and reducing information asymmetry between managers and stakeholders. In Table 6, we present regression results using the GMM system. Indeed, the interaction term MCON**AQ* injures DACC (coefficient of -0.4970 at 5%) and both RM-1 and RM-2 (coefficient of -0.2622 at 1% and -0.3266 at 1%), respectively, which confirms our developed hypothesis of a positive interaction between high audit quality and strong military connections on earnings management.

Regarding using the control variable in the study, FS shows a positive and significant impact over accrual and real earnings management proxies. For this reason, big companies might contribute to actual earnings manipulation to attain shareholders' expectations. Real earnings management results are similar to those in this test. Overall, these results collectively describe how military connections, audit quality, and various control variables jointly impact the use of accrual-based and real earnings management practices by the firms under study. These results are consistent with (Khalil et al., 2022). The results are consistent with the hypothesis that external connections in firms audited by Big Four auditors lead to more restricting accrual and real earnings management. In contrast, high-quality audits improve financial reporting reliability and reduce information asymmetry.

The marginal effect analysis used in this study, following Khan et al., (2024), in Table 6 (Panel B) demonstrates how audit quality (*AQ*) moderates the relationship between military connections (*MCON*) and earnings management (*EM*), revealing that the combined effect of military connections and high-quality auditing leads to a significantly stronger reduction in both accrual-based (*DACC*) and real earnings management (*RM-1*, *RM-2*) compared

to military connections alone. The baseline results Table 5 show that military-affiliated firms inherently engage in less earnings manipulation, as evidenced by the negative and significant coefficients for *MCON* across all *EM* measures. This aligns with the disciplinary role of military leadership, where structured, hierarchy-driven governance naturally discourages financial misreporting. However, the interaction term (*MCON*×*AQ*) in Table 6 is also negative and significant, indicating that high-quality audits amplify this restraining effect. The marginal effects ($\beta_1 + \beta_3$) further confirm that the total suppression of *EM* is substantially stronger when firms have both military ties and rigorous audits. For instance, the impact on *DACC* nearly doubles from -0.3345 to -0.7120, while the effect on real *EM* (*RM-2*) increases from -0.2155 to -0.4686, underscoring the synergistic power of these governance mechanisms. Agency theory supports such findings which suggests that military connected boards act as internal monitors, reducing agency costs by curbing managerial opportunism, while external audits impose additional oversight, ensuring stricter compliance with financial standards. This dual governance mechanism internal discipline coupled with external scrutiny, creates a robust barrier against earnings manipulation.

Alternative Measurement. The alternative robustness analysis investigates the relationship between military connections and such earnings management as accrual-based and real earnings management. we employed the Generalized Method of Moment (GMM) to justify our findings with different proxy of military connections. We construct an alternative measure of military affiliation, the ratio of military-affiliated directors (*RMD*) to the total number of directors. This continuous measure supplements the binary variable and tests whether the intensity of military

Table 6 Military connection and earnings management: Role of audit quality.

Panel A						
	Accrual Earnings		Real Earnings Management			
	DACC		RM-1		RM-2	
AUQ	0.9637*** (-0.1662)		-0.0423** (-0.0225)		-0.7305*** (-0.2747)	
MCON*AUQ β_3		-0.4970** (-0.0475)		-0.2622** (-0.1384)		-0.3266*** (-0.1651)
FSZ	0.2823*** (-0.0949)	0.1088 (-0.103)	0.0291*** (-0.01336)	0.1625*** (-0.0406)	0.3258*** (-0.0352)	0.1691*** (-0.0334)
LEV	0.6280*** (-0.2154)	0.5542*** (-0.162)	-0.0517*** (-0.0256)	-0.2309*** (-0.0638)	0.0702*** (-0.0292)	-0.2251*** (-0.0526)
FTY	-0.054 (-0.0377)	-0.0263 (-0.0247)	0.0216*** (-0.0045)	0.0124*** (-0.0097)	0.4437*** (-0.2169)	0.0107*** (-0.008)
FAG	-0.0882*** (-0.0238)	-0.0272*** (-0.011)	0.0450*** (-0.0028)	-0.0322*** (-0.0043)	-0.0069 (-0.009)	-0.0100*** (-0.0036)
CAP	0.6717** (-0.3668)	0.1087 (-0.1194)	0.0224 (-0.0436)	0.005 (-0.0471)	-0.0383 (-0.0347)	-0.0855*** (-0.0387)
Constant	1.2123*** (-0.1747)	2.083 (-5.9936)	-0.4464 (-0.4963)	5.1756*** (-2.3628)	1.3272 (-0.8947)	4.8086*** (-1.945)
Obs.	2640	2640	2640	2640	2640	2640
Years	13	13	13	13	13	13
No of Firms	240	240	240	240	240	240
Firm-FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes
AR (1)	-2.71 (-0.087)	-4.34 (0.000) ***	-1.61 (0.000) ***	-4.35 (0.000) ***	-6.65 (0.000) ***	-2.46 (0.000) ***
AR (2)	7.88 (-0.379)	-2.8 (-0.172)	3.88 (-0.107)	-5.44 (-0.151)	-9.62 (-0.391)	-5.66 (-0.509)
Hansen Test	2.92 (-0.713)	3.36 (-0.948)	2.05 (-0.915)	6.68 (-0.671)	10.317 (-0.317)	8.45 (-0.489)
Wald Test	18.8 (0.000) ***	17.53 (0.000) ***	13.34 (0.000)***	17.72 (0.000) ***	22.911 (0.000) ***	20.51 (0.039) **
Panel B						
$H_0: \beta_1 = (\beta_1 + \beta_3)$		-0.7120*** (-0.1245)		-0.3707*** (-0.1916)		-0.4686*** (-0.2354)

Table 6 presents the GMM system approach results of the moderating role of audit quality in relationship between military connections and earnings management. DACC are presented in column 1, RM-1 in column 2, and RM-2 in column 3. Finally, the last three columns are devoted to the RM metric on the individual level. Significance levels: ***, **, * (1%, 5%, 10%)

presence systematically influences earnings management. The results of the GMM estimator and the Hansen test performed to assess the validity of an instrument are presented in Table 7. The problem of over-identification caused by the proliferation of instruments can be overcome using the techniques proposed by Roodman D (Roodman, 2009). The Hansen test of over-identification examines the model specifications for validity, ensuring there are no connections between the instrument and the error term. The evidence from primary analysis suggests a negative association between military connections and both forms of earnings management. Ratio (RMD), is added to support these findings. Secondly, considering the military ratio in the context of the accruals earnings management literature, the coefficient for the absolute discretionary accruals DACC about the RMD is -0.5416 and significant at 10%, which indicates that the negative relationship between its military connections and absolute discretionary accruals also holds when including the military ratio, thus further strengthening the original results. The aggregate real earnings management coefficients for the 'Military Ratio' are -0.2693 and 0.3473. The negative relationships between military connections and real earnings management activities are statistically significant at the 1% level, implying that the negative relationship between military connections and real earnings management activities is still observed. Moreover, the negative consequences endure with the single proxies for real earnings management. The robustness analysis confirms that military

connections offer stable and robust support to both accrual-based and real earnings management, strengthening the robustness of the main findings. This consistency across different measurements enhances the confidence in robust observed relationships. Moreover, these results are further affirmed by statistical tests such as AR, Hansen, and Wald tests. These tests validate the instrument and identify the restrictions whereby the additional variable does not upset the model's integrity.

Conclusion

This study employs a comprehensive and rigorous empirical approach to investigate the complex impact of military connections on earnings management within non-financial firms listed on the Pakistan Stock Exchange over a twelve-year period, spanning from 2010 to 2022. The analysis reveals compelling evidence that firms with board members affiliated with military institutions exhibit significantly lower levels of both accrual-based and real earnings management. This finding suggests that military connections play a crucial role in enhancing the integrity of financial reporting among these companies. The underlying reasons for this observed reduction in earnings manipulation can be traced back to the disciplined, ethical, and rule-abiding characteristics that are often instilled in directors with military training. These attributes are likely to foster a governance culture that prioritizes transparency and accountability, which is essential for maintaining the trust of investors and stakeholders.

Table 7 Robustness check- GMM approach.

	Accruals based earnings	Real earnings management				
	DACC	RM-1	RM-2	ACFO	APRO	ADEX
RMD	-0.5416* (0.2985)	-0.2693*** (0.0416)	-0.3473*** (0.0323)	-0.0395*** (0.0158)	-0.0552* 0.0323	-0.3078*** (0.0295)
FRS	0.2769*** (0.0725)	0.1073*** (0.0386)	0.1156*** (0.0300)	0.0120 (0.0147)	0.0073 (0.0287)	0.1036*** (0.0274)
LEV	0.6567*** (0.2107)	-0.1340*** (0.0294)	-0.1333*** (0.0228)	0.0166 (0.0112)	-0.0113 (0.0228)	0.1167*** (0.0209)
FTY	-0.0567 (0.0375)	0.0204*** (0.0052)	0.0178*** (0.0041)	-0.0006 (0.0020)	0.0019 (0.0040)	-0.0172*** (0.0037)
FAG	-0.0125 (0.0234)	0.0004 (0.0033)	-0.0065*** (0.0025)	0.0064*** (0.0012)	0.0008 (0.0026)	0.0001 (0.0023)
CAP	0.6553* (0.3629)	-0.0264 (0.0506)	-0.0574 (0.0393)	0.0380*** (0.0192)	0.0400 (0.0263)	0.0194 (0.0359)
Constant	1.4931*** (0.1118)	1.3202*** (0.5729)	1.2045*** (0.4449)	-0.2841 (0.2178)	0.1878 (0.4517)	-0.9203*** (0.4069)
Obs.	2640	2640	2640	2640	2640	2640
Years	13	13	13	13	13	13
No of Firms	240	240	241	240	240	240
Firm-FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	No
AR (1)	-1.94 (0.05)	-8.00 (0.00)	-2.62 (0.01)	-5.26 (0.00)	-3.50 (0.00)	-5.38 (0.00)
AR (2)	8.94 (0.35)	5.81 (0.27)	5.50 (0.62)	8.50 (0.62)	8.15 (0.27)	9.57 (0.57)
Hansen Test	2.63 (0.99)	2.69 (0.51)	8.88 (0.77)	5.66 (0.65)	9.34 (0.12)	2.85 (0.73)
Wald Test	10.55 (0.00)	19.40 (0.00)	12.88 (0.00)	15.63 (0.00)	16.93 (0.00)	17.25 (0.00)

Table 7 presents the GMM system approach results of the impact of military affiliations on DACC are presented in column 1, RM-1 in column 2, and RM-2 in column 3. Finally, the last three columns are devoted to the RM metric on the individual level. Significance levels: ***, **, * (1%, 5%, 10%).

Consequently, the presence of military-affiliated board members appears to facilitate the incorporation of more robust governance practices, thereby reducing the propensity for earnings management. Moreover, the study highlights an important moderating role of audit quality.

The findings indicate that firms audited by Big Four auditors present an even stronger negative correlation between military affiliations and earnings manipulation. This suggests that external auditing standards and practices significantly enhance the governance framework within which military-connected firms operate. The rigorous scrutiny and professionalism associated with Big Four audits likely amplify the positive effects of military connections on financial reporting, creating a dual-layered approach to ensuring accuracy and reliability in financial disclosures. Through its comprehensive analysis, this research underscores the critical importance of both internal governance structures and robust external auditing mechanisms in mitigating earnings management. It promotes a culture of transparency in financial reporting, which is vital for fostering investor confidence and promoting overall market integrity. Theoretically, our findings extend upper echelons theory by showing military traits constrain financial misreporting, even in weak institutional settings. Practically, regulators in emerging markets should encourage: Disclosure of directors' military ties, Mandatory audits for military-linked firms to leverage their governance potential.

Limitations and Future Research Direction. This study has some limitations, which suffice to note that it uses a different measure. However, the possibility for measurement errors remains. So, in the first place, the justification of consequences depends on the accuracy of the dependent variable substitutes

when capturing manipulation activities. Secondly, the leeway of the study is limited to studying the affiliation between military influences and accrual-based and real earnings management, whereas countless other dimensions of corporate reporting, like accounting conservatism, corporate disclosure, and value relevance, are excluded. These areas received no study, and future research could help fill them.

Furthermore, it also incorporates attention to subsequent research on the differential effects of current and former military connections on earnings management and the differential effects of individual board members' external connections. Specifically, this study investigates the authority role of former military directors in diminishing earnings management in the context of the Pakistani economy. It will be of great value if it is extended to current connections and examines similar dynamics in other military-dominated or hybrid political regimes of emerging countries. Finally, the study focuses specifically on military affiliations as a dimension of corporate governance, whereas other governance aspects such as gender diversity, board independence, and CEO duality are excluded. The included control variables largely reflect financial characteristics, limiting the ability to fully account for broader governance influences. Future research could extend the scope by examining these additional governance dimensions and their interaction with military connections.

Research Implications. This study offers significant theoretical and practical contributions to corporate governance and financial reporting literature, particularly in emerging markets like Pakistan. Theoretically, it extends the upper echelons theory by demonstrating that military-affiliated directors characterized by discipline, ethical behavior, and governance adherence act as an

internal monitoring mechanism, reducing both accrual-based and real earnings management. This challenges conventional perspectives on board diversity by introducing military connections as a unique determinant of financial integrity. Furthermore, the study integrates military-linked governance into the broader corporate governance discourse, highlighting how military traits substitute for weak institutional oversight. The moderating role of audit quality introduces a dual-layered governance framework, emphasizing the synergy between internal (military discipline) and external (audit scrutiny) mechanisms in enhancing financial transparency. Practically, the findings provide actionable insights for regulators, firms, and investors. Regulators in hybrid or military-influenced economies should mandate disclosures of directors' military ties and enforce high-quality audits (e.g., Big Four) to strengthen financial oversight. Firms can leverage military-affiliated directors to improve governance and reduce earnings manipulation, while investors may use military connections as a proxy for assessing governance quality in emerging markets.

Data availability

The datasets used in this study are publicly available in the following sources. Firm annual reports and ORBIS database which can access via subscription through Bureau van Dijk. Data will be available from the authors upon reasonable request.

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Author contributions

Hussain Abbas: Conceptualization, Methodology, Software, Formal analysis, Data curation, Writing—original draft. Zhao Rui Feng: Supervision, Resources, Validation, Writing—Review and Editing, and Funding Acquisition. Muhammad Malik: Validation, Investigation, review and editing. Muhammad Dawood: Validation, data curation, review and editing.

Competing interests

The authors declare no competing interests.

Ethical Approval

This study is based on publicly available secondary data and does not involve human or animal subjects. As such, ethical approval was not required.

Informed Consent

This research used exclusively publicly accessible data (annual reports and ORBIS database). This study used secondary data and that did not involve human participants.

Additional information

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