# Corporate Governance's Role in Combating Earnings Manipulation: Leveraging Cyber Laws, Forensic Accounting, and Emerging Technologies for Prevention and Early Detection\*

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#### Abstract

This paper aims to examine the impact of Corporate Governance on Earnings Manipulation, with Cyber Laws, Forensic Accounting Practices, and Emerging Technologies serving as moderating factors in the context of financial reporting integrity. The study employs a quantitative research method, collecting data from 400 professionals working in high-tech industries across China. Using Partial Least Squares Structural Equation Modeling (PLS-SEM), the research validates its central hypothesis: that robust corporate governance practices significantly reduce the incidence of earnings manipulation. Furthermore, the findings reveal that cyber laws and emerging technologies play a crucial moderating role by enhancing transparency, strengthening oversight, and minimizing opportunities for financial fraud. Forensic accounting practices are also found to be instrumental, offering additional layers of scrutiny and investigative support that aid in detecting irregularities and ensuring compliance with financial regulations. This multi-faceted approach underscores the importance of integrating legal, technological, and forensic mechanisms into organizational governance structures. The study recommends that companies and regulatory bodies adopt comprehensive compliance strategies that incorporate cybersecurity laws, innovative digital tools, and forensic accounting frameworks. Such integration not only curbs manipulative financial practices but also promotes greater accountability and trust among stakeholders. Consequently, policy implications include the need for updated cyber regulations, investment in advanced technological infrastructures, and institutionalising forensic accounting functions within corporate governance systems to foster ethical financial management and long-term organisational sustainability.

**Keywords:** Corporate governance; Earning manipulation; Cyber laws; Forensic accounting; Emerging technologies

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#### A. INTRODUCTION

The current global developments in the corporate world have taken a new dimension with the technological revolution, globalisation, and new institutional changes towards corporate governance and financial reporting. (Claessens & Yurtoglu, 2013) Earnings manipulation, defined as falsifying reports on an organization's earnings to mislead stakeholders, has become rampant. It is considered one of the central vices that affect sound financial systems and lead to the downfall of the reputation of the organizations. (Dechow et al., 2010) They also erode the accurate picture of organizations and consequently affect the stability of investors, negatively affecting the overall efficiency of the markets and the broader economy. (Healy & Wahlen, 1999) Accordingly, sound corporate governance structures are gradually being regarded as vital controls against fraud and exercises in promoting transparency, accountability, and integrity in preparing and presenting corporate financial statements. (Agrawal & Chadha, 2005)

Corporate governance, described as the mechanisms that control and monitor a business entity's management and support executive operations, significantly addresses the issue of financial malpractice. (OECD, 2015) Governance means that ethical standards, accountability, and compliance are improved in organisations, which are key to the efficient running of the organisations. Thus, amid the global focus on governance reforms, more or less frequent examples of earnings manipulations are detected, indicating deficiencies in the existing systems and generating essential questions about the efficiency of the corporate governance frameworks. The high prevalence of fraud in the context of recurring financial scandals has raised the stakes for better means of identifying, preventing, and responding to earnings management, particularly in the burgeoning technology and innovation-driven sectors. (Kusnadi, 2011)

High-technology industries are some of the most vulnerable, with increased risks of earnings manipulation because of factors such as legends of technological modernization, anticipated high valuations, and intricate operations. This sector has been under pressure to deliver strong financial results to the market from vulnerable investors who can inflate their earnings to retain stock price and investor confidence. (Lev. 2003) Therefore, the high-tech industry, which plays an important role in economic development and modernization, needs strong governance methods and practical tools to minimize these risks.

Despite all the efforts to implement corporate governance mechanisms, earnings manipulation remains a problem, especially in high-tech industries. As stated before, corporate governance seeks to prevent ethical misconduct and financial fraud. Still, its measures are hampered by weak regulatory compliance, poor technology adoption, and weak forensic accounting. (Braun & Mueller, 2024; Efunniyi et al., 2024) However, these changes are insufficient in that they not only expand opportunities for manipulation due to the fast development of technology and plethora of new IT platforms but also make the effort to regulate these industries even more challenging.

According to the research problem, this study examines how corporate governance influences earnings management to understand how financial statements are affected. It also investigates how cyber laws can improve company governance by preventing earnings manipulations. Thirdly, it analyzes forensic accounting and other emerging technologies as moderating factors to assess the governance structures' ability to address financial malpractice and improve detection and prevention. The study hypothesizes that corporate governance and earnings manipulation are inversely related, but cyber laws, forensic accounting, and developing technology may influence this association.

This research aims to fill these gaps and improve governance systems. Although prior works (Abbas & Abbas, 2021; Banerjee et al., 2024; Biswas et al., 2022; Han & Wu, 2023; Thoppan et al., 2021; Velte, 2023) Review the relationship between CG and FR; the moderating variables, especially in high-tech industries, are neglected. Since this study addressed cyber legislation, forensic accounting, and technologies, its findings provide a holistic view of governance efficacy. This research also suggests ways for politicians, regulators, and industry practitioners to improve corporate governance and financial systems. (Brown et al., 2011)

This study focuses only on Chinese high-tech industries since China is a global leader in technology and digitalization. China's corporate governance and earnings manipulation are relevant since its economy is continually changing and becoming more difficult and turbulent. (Wang et al., 2023) The report combines poll data from 400 subject matter experts to assess governance structures and offer improvements. This context-specific approach makes the conclusions more applicable to the investigated countries and gives other countries and sectors with similar difficulties experience.

Cyber rules implemented as a moderating factor show how enforcement laws are adapting to new-age interactions. Cyber laws regulate and safeguard cybersecurity; data protection is crucial to detecting and reporting financial fraud. (Brenner, 2012) Laws prohibit or control digital transactions, privacy, and

information exchange, giving corporate governance frameworks. This research tries to determine how effective cyber laws are in increasing the negative link between corporate governance and earnings manipulation to help evaluate regulatory measures to combat financial crime.

Forensic accounting is the process of detecting, investigating, and preventing fraud. It helps evaluate and avoid fraud in the financial reporting system and procedure misuse. (Bhasin, 2013) Therefore, forensic accountants may actively identify manipulations and preserve ethical standards using their accounting and detective skills. This article addresses this gap by investigating how forensic accounting methods mediate the relationship between corporate governance and earnings manipulation to establish effective governance solutions.

Artificial intelligence, blockchain, and data analytics can address earnings distortions. These technologies provide real-time tracking, analysis, and fraud identification, boosting the organization's credibility in detecting and preventing manipulation. (Radziwill, 2018) This paper analyzes new technologies' moderating influence and shows they improve governance frameworks and transparency. The findings urge enterprises to use innovation to improve financial integrity.

Thus, this research seeks to uncover a key issue in corporate governance and financial reporting and elements that significantly impact governance in high-tech firms. This study uses moderating roles of cyber laws, forensic accounting, and emerging technologies to combat earnings manipulation and improve financial systems. Policymakers, regulators, and industry practitioners may enhance governance processes and promote openness and accountability with the paper's recommendations. This research only examined high-tech sectors in China to address the global dilemma, but it has important implications for other regions and industries to improve digital governance models.

#### Literature Review

This study focuses on the correlation between corporate governance and earnings manipulation, which has received much attention in financial and managerial studies. Therefore, synthesising existing literature, this review focuses on corporate governance, earnings manipulation, the moderating effects of cyber laws, forensic accounting, and emerging technologies. Thus, it supports the study's hypotheses and objectives and offers a strong theoretical framework for the case analysis.

## 1. Corporate Governance and Earnings Manipulation

Corporate governance is an important mechanism that provides structure in organisations and prevents organisations from engaging in unethical behaviours like earnings manipulation. Sehrawat et al., (2019) have established a negative correlation between the level of corporate governance and the probability of earnings manipulation. For instance, Salehi et al. (2023), pointed out that higher levels of governance, board, and internal control mechanisms decrease the likelihood of managerial self-serving behaviour and create an environment in which manipulation of financial statements is less likely to occur. Similarly, Elmashtawy et al. (2024), expounded on the contribution of audit committees in improving the quality of financial reports to eliminate manipulation risks.

Corporate governance as a solution to agency costs reduces conflicts between managers and shareholders by ensuring that executives and shareholders have the same objectives. (Meckling & Jensen, 1976) Unsurprisingly, governance structures are not equally efficient in all industries or countries. García-Sánchez et al. (2020) was stated that contextual factors like regulation and culture may affect governance efficiency. Moreover, (Wahid, 2019) It also focused on the role of Gender diversity and board expertise in enhancing oversight and restraining earnings manipulation.

However, these results show that continued financial scandals imply that current governance models are only partially effective. As elucidated by Salehi et al. (2023), Busirin et al. (2015), Herawaty and Solihah (2019), and Almasarwah et al. (2024) On the need to reinforce the reforms, great strides have been made towards enhancing and implementing regulatory enforcement and using new and better tools to tackle emerging fraud techniques in financial crimes. These perspectives serve as a positive starting point in providing a negative hypothesised relationship between corporate governance and earnings manipulation, as explained in H1.

## 2. The Moderating Role of Cyber Laws

Cyber laws refer to cyberspace regulations and policies, specifically how corporations minimise cyber threats and mishap risks. These laws provide legal rules for the exchange and conduct of digital business, data protection, and fraud prevention, thus reducing the chances of earnings manipulation. According to Hayes (2020) Sound cyber laws greatly enhance governance measures, especially in organisations dependent on online systems.

The threats in the virtual world are evolving, so the legislation must be the same. In their work Cortez and Dekker (2022) explain that inadequate or non-existent or weak cyber laws are ineffective in preventing manipulation strategies, suggesting that the problem's resolution requires constant legislative improvements. Moreover, Dashkevich et al. (2024) provided evidence that the laws relating to innovative financial reporting increase corporate disclosure and accountability, thus diminishing manipulation risks.

According to the research conducted by Shalhoub and Al Qasimi (2010) as well as Wang et al. (2023) the problems of implementing virtual legislation in emerging economies are manifold, from a lack of funds to insufficient regulation. Adopting technology-enabled compliance instruments like blockchain-based systems has revealed the potential to meet these hurdles. (Zhang & Guan, 2023) These findings support the hypothesis that strong cyber laws strengthen the negative relationship between corporate governance and earnings manipulation (H2).

## 3. The Moderating Role of Forensic Accounting

Forensic accounting is one of the most popular and essential fields. It integrates accounting and investigative knowledge to fight financial fraud. Its incorporation into corporate governance systems improves firms' performance in detecting and countering issues with financial reporting. Bhasin (2013) Forensic accountants are instrumental in exposing earnings manipulation in dynamic financial structures.

Several pieces of literature have also established a positive relationship between using forensic accounting practices and preventing financial fraud. For instance, Salih et al. (2022) companies that hired forensic accountants in their organisations recorded low fraud cases. Similarly, Njanike et al. (2009) and Nandini and Ajay (2021) highlighted the value of forensic audit training and applications in enhancing fraud-fighting instruments. Its integration into corporate governance frameworks enhances the ability of organizations to identify and address irregularities in financial reporting. Bhasin (2013) forensic accountants play a crucial role in uncovering earnings manipulation, particularly in complex financial environments.

Several studies have highlighted the efficacy of forensic accounting practices in mitigating financial misconduct. For example, Salih et al. (2022) found that organizations employing forensic accounting teams experienced a significant reduction in financial irregularities. Similarly, studies by Njanike et

al. (2009) and Nandini and Ajay (2021) emphasized the importance of forensic audit training and tools in strengthening fraud detection capabilities. However, forensic accounting is not well implemented across organizations. Umara et al., (2016) also stated that they face many challenges due to resource constraints due to the unavailability of a specialised workforce. Furthermore, a recent study by Burnett et al. (2024) underlined the necessity of improved interaction between forensic accountants and corresponding bodies. These insights provide evidence for the proposed hypothesis that forensic accountancy as a moderator enhances the efficiency of governance, which reduces the earnings manipulation (H3).

## 4. The Moderating Role of Emerging Technologies

Technological advancements have changed corporate governance and financial reporting regimes, including artificial intelligence (AI), blockchain, and data analytics. These technologies provide new monitoring approaches for identifying and avoiding earnings manipulation. For example, Daraojimba et al. (2023) demonstrated that the proposed AI methods improve the accuracy of detecting anomalous patterns in financial data and minimize the risks of their manipulation.

Various researchers have focused on blockchain regulatory technology to enhance governance structures. Dashkevich et al. (2024) proved that controlling mechanisms in the context of blockchain systems extended the quality of audit trails and accountability to reduce incidents of economic fraud. Further, studying the work of Wang et al. (2023) revealed that smart contracts can integrate with compliance and monitoring by automating them.

Data analytics as a part of governance practices has also been reported as a potential area. Moreover, Hashimzade et al. (2016) and Dbouk and Zaarour (2017) Highlighted predictive analytics' work to detect some manipulation patterns and prevent them. However, the use of these technologies is not without challenges. Wu (2024) states that high implementation costs and organisational resistance remain primary reasons governing frameworks integrate advanced technologies.

Innovation is especially valuable in technology-intensive sectors where conventional corporate management styles are inadequate. Ayu Paramitha and Fadjarenie (2023) and Kipilimba (2024) call for a technology approach to financial reporting challenges in these industries. These results have implications for H4, suggesting that emerging technologies enhance corporate governance, which may reduce earnings manipulation motives.

#### B. METHODS

This article attempts to connect corporate governance, profit manipulation, and moderating factors such as cyberlaw, forensic accounting, and emerging technologies. A standardised questionnaire was adopted from the existing literature to gather quantitative data from 400 high-tech industrial experts in China. The methodological framework's selection enables rigorous investigation of posited relationships via Partial Least Squares Structural Equation Modelling (PLS-SEM), which is appropriate for the models' complexity and sample size.

This study used a comprehensive questionnaire with five sections: earnings manipulation, cyber legislation, forensic accounting methods, technology, organisational culture, and corporate governance. Constructs are adopted from reputable sources, including. Dechow et al. (2010), (Pandey et al., 2020), and Singleton and Singleton (2010). After completing the questionnaires, participants were asked to rate their agreement with each item on a Likert Scale ranging from Strongly Disagree to Agree Strongly. This method collected accurate views based on participants' predicted experiences.

High-tech workers were targeted, including forensic accountants, compliance officers, auditors, and IT specialists. Purposive sampling selected applicants with considerable corporate governance and financial reporting experience. According to Hair Jr et al. (2021), 400 respondents were enough for the final PLS-SEM study.

The questionnaire was constructed using constructs available in the literature. (Dechow et al., 2010; Pandey et al., 2020; Singleton & Singleton, 2010) Its reliability and validity were tested. Cronbach's alpha coefficients were used to assess the internal consistency of the four measures, with values above 0.7. Convergent and discriminant validity were also examined using the AVE and Fornell-Larcker criteria. The questionnaire captured key dimensions of the variables such as regulations and mechanisms that can mitigate earnings management, the relative efficiency of cyber laws in protecting firms' financial information, methods of detecting fraud with the help of forensic tools, trends in the application of innovative technologies such as blockchain and AI, and practical aspects of ethical and transparent corporate governance.

PLS-SEM was chosen as the primary analytic tool because it is suitable for dealing with models with multiple-formatted constructs and moderation effects. SmartPLS tested the measurement model for internal consistency, reliability, and construct validity, with factorial loadings greater than 0.7. Path coefficients, t-

values, and p-values were employed in this structural model testing, along with hypothesised moderations applied to interaction terms, R-squared, and effect size.

This study observed high ethical considerations during data collection to prevent the researcher from recognising the participants. Respondents were first asked for their consent after being informed of the study's purpose and that their responses would be used solely for research purposes.

#### C. RESULTS AND DISCUSSION

This section elucidates the analysis of the results from the measurement model and its implications in line with those of earlier literature. The findings confirm the constructs' internal consistency and concurrent validity: Corporate Governance, Earnings Manipulation, Cyber Laws, Techniques of Forensic Accounting, and Emerging Technologies. The study supports the hypothesised relationships while emphasising the importance of cyber laws, forensic accounting, and emergent technologies to strengthen governance frameworks to curb the vice of earnings manipulation.

**Table 1: Convergent validity** 

Constructs	items	Loading	Alpha	CR	AVE
Corporate Governance (CG)	CG1	0.847	0.916	0.937	0.749
	CG2	0.857			
	CG3	0.859			
	CG4	0.886			
	CG5	0.878			
	CL1	0.932			
Cyber Laws (CL)	CL2	0.929	0.961	0.97	0.865
	CL3	0.933			
	CL4	0.94			
	CL5	0.915			
	PEM1	0.849			
Earning Manipulation	PEM2	0.81	0.908	0.932	0.732
	PEM3	0.842			

	PEM4	0.886			
	PEM5	0.888			
	TA1	0.865			
Emerging Technology	TA2	0.833	0.884	0.915	0.684
	TA3	0.805			
	TA4	0.777			
	TA5	0.852			
Forensic Accounting Practices	FAP1	0.815	0.879	0.911	0.673
	FAP2	0.772			
	FAP3	0.788			
	FAP4	0.924			
	FAP5	0.793			

Table 1 confirms the measurement model and shows that all constructs have very high levels of convergent validity. The high loading values obtained for all the constructs imply Composite Reliability (CR) and Average Variance Extracted (AVE), revealing that the current research model is reliable and valid. These formed a solid empirical ground for examining the connections between corporate governance, earnings manipulation, and the mediating roles of cyber laws, forensic accountancy, and technologies.

The reliability and validity of the Corporate Governance questionnaire are pretty robust, with Cronbach's alpha (0.916) and AVE (0.749) above the acceptable levels. These findings are consistent with prior work, for instance, Velte (2023) stresses the significance of board independence and transparency to curtail earnings management. The high loading values emerging from all the items offer substantive evidence that the proposed construct accurately captures all the essential aspects of corporate governance, which supports the negative association between earnings manipulation. Likewise, high reliability is obtained for the Cyber Laws, confirming the construct reliability, with Cronbach's Alpha of 0.961 and AVE of 0.865. Such findings support this study because other studies like Brenner (2012) and Hayes (2020) I agree that regulatory measures play a crucial role in avoiding such fraud. The high factor loadings of indicators show the mediating role of cyber laws in the impact of the level of governance on earnings manipulation. This supports the notion of regulation, and more so compliance, since some business disciplines heavily rely on the digital arena.

The construct for Earnings Manipulation has a reliability of 0.876, and Fornell's AVE (0.732) estimates indicate that the items are valid since they reflect the various perspectives of earnings misreporting. These findings support the work of Dechow et al., (2010). The results also support the hypothesis that there is an inverse relationship between earnings manipulation and sound governance structures. Though the average variance extracted value of Emerging Technologies is slightly lower than that of Information Technology, the scale's reliability is very satisfactory (Cronbach's Alpha = 0.884), and the convergent validity also proves worthy (AVE = 0.684). These findings are consistent with existing literature. (Wu, 2024), which shows that while relatively new technologies like blockchain or artificial intelligence may harbor significant improvements and innovative benefits, they may also pose issues, such as high implementation costs and organizational opposition to their integration into governance architectures. Nevertheless, the study provides evidence that the application of emergent technologies is useful in moderating the transparency of financial reports.

The current study reveals high reliability and convergent validity of Forensic Accounting Practices with total variance extracted (AVE= 0.673), confirming the adequacy of the construct to capture the dimensions under study. This supports the work of Bhasin (2013) and Njanike et al. (2009) Who pointed out that forensic accounting is helpful in cases of fraud? The high loadings for items like the use of forensic tools and the presence of the forensic accounting team provide a solid backing to the proposed construct of moderating the effect of governance on earnings manipulation.

Consequently, it can be stated that all the hypothesized relationships are supported to a great extent, and all of the measured constructs for their reliability and validity are highly appreciable. The result supports and extends previous research, which shows that corporate governance hurts earnings manipulation, and cyber laws, forensic accounting, and emergent technologies condition this relationship. In support of the theoretical framework above, the study's findings underscore the importance of multi-faceted initiatives to improve corporate governance by appealing to legal and technological angles. This paper presents a holistic framework that adds to the current literature and practices for enhancing financial reporting credibility, particularly in technology-inclined organizations where conventional corporate governance control may not suffice.

**Table 2: Fornell Larcker** 

CG	CL	EM	ET	FA
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Corporate Governance	0.865				
Cyber Laws	0.424	0.93			
Earning Manipulation (PEM)	0.399	0.396	0.855		
Emerging Technology (ET)	0.436	0.481	0.485	0.827	
Forensic Accounting (FAP)	-0.109	-0.14	-0.155	-0.062	0.82

The tests of discriminant validity in Table 2 also reveal necessary and sufficient conditions for discriminant validity based on Fornell and Larcker (1981) criterion that supports the idea that all constructs are methodologically different from each other. The values along the diagonal in the table, the AVE estimates of the individual constructs, are higher than those in the columns and rows, which signifies the inter-construct correlations; hence, the Fornell-Larcker condition for discriminant validity is achieved. The results presented here address the one-dimensionality of each construct, ensure the measurement model's reliability, and strengthen the hypothesized relationships in this study.

Corporate governance reveals a discriminant validity, which confirms that the percentage of AVE (0.865) is higher than the intersection of the construct with the other ones. The relationship with earnings manipulation is moderately negative (Pearson's r = -0.399), supporting Hypothesis H1, which states that sound governance structures protect against earnings manipulation. These results support the literature, based on studies like Velte (2023) That stresses the use of governance structures that enhance transparency and ethical tone in reporting entity finances.

Cyber Laws show excellent discriminant validity where the square root of AVE (0.93) is higher than all the construct correlations. This moderate correlation with Corporate Governance is found to be 0.424, which shows how vital the regulations are in ensuring governance effectiveness. When Cyber Laws are strong, the correlation between Cyber Laws and Earnings Manipulation (-0.396) is more conducive to rejecting Hypothesis H1, thus supporting Hypothesis H2. Such findings are supported by Brenner (2012) and Hayes (2020) who argue that legal factors reduce fraud in digital financial systems.

The AVE of the Earn Manipulation is 0.855 which is larger than all other figures and proves that Earning Manipulation is a distinct construct. The moderate positive correlations with Corporate Governance being 0.399 and Cyber Laws being 0.396, hence support the impression that both Governance

mechanisms and Regulatory frameworks have vital roles to play in minimising the levels of financial mal-reporting. These findings support the presence of the literature, including that of Dechow et al. (2010) to advance the understanding of the relationship between earnings quality and reporting credibility.

Convergent validity of Emerging Technology is also established because the value of the square root of AVE (0.827) is higher than the values of the cross-loadings of the construct. Consistent with H4, the positive and significant link between Corporate Governance (0.436) and Earnings Manipulation (0.485) sustains its position as a moderating variable. These findings corroborate Wu (2024) and Tapscott and Tapscott (2016) who stress the opportunities for using AI, blockchain, and data analytics to improve the work of governance models and eliminate the possibility of manipulation.

As it concerns distinctiveness, the estimate of the square root of AVE (0.82) is greater than the correlations with other constructs in the context of Forensic Accounting Practices. We also found that Corporate Governance experienced a negative correlation in forensic accounting (-0.109), while Earnings Manipulation had an even stronger negative correlation (-0.155), thus supporting H3. These findings support the arguments of Bhasin (2013) and Njanike et al. (2009) on the importance of forensic auditing, concerning identification and prevention of fraud.

Altogether, the Fornell-Larcker Criterion analysis indicates the discriminant validity of the constructs and gives empirical evidence of the hypothesized links. The study establishes crucial insights into the prospects of governance, regulatory structures, forensic accounting, and computing technology in curbing earnings manipulation consistent with theoretical propositions in the literature. These findings further support governments' need for a multi-pronged approach to ensure that corporate governance compliance is enforced rigorously, via regulation and legislation, and implemented technologically and via specialized forensic financial reporting.

CL CG EM ET FA CG1 0.847 0.351 0.326 0.32 -0.094CG2 0.857 0.358 0.317 0.385 -0.092 CG3 0.859 0.349 0.306 0.359 -0.099 CG4 0.886 0.377 0.358 0.407 -0.097CG5 0.878 0.394 0.402 0.406 -0.091

**Table 3: Cross-loadings** 

CL1	0.387	0.932	0.359	0.45	-0.148
CL2	0.392	0.929	0.36	0.447	-0.151
CL3	0.421	0.933	0.352	0.452	-0.13
CL4	0.41	0.94	0.374	0.446	-0.123
CL5	0.366	0.915	0.394	0.442	-0.101
FAP1	-0.133	-0.16	-0.132	-0.061	0.815
FAP2	-0.053	-0.051	-0.094	-0.009	0.772
FAP3	-0.044	-0.123	-0.124	-0.074	0.788
FAP4	-0.076	-0.109	-0.111	-0.038	0.924
FAP5	-0.119	-0.111	-0.155	-0.058	0.793
PEM1	0.372	0.342	0.849	0.441	-0.124
PEM2	0.339	0.401	0.81	0.446	-0.152
PEM3	0.346	0.33	0.842	0.407	-0.144
PEM4	0.323	0.305	0.886	0.376	-0.126
PEM5	0.315	0.299	0.888	0.39	-0.113
ET1	0.37	0.404	0.45	0.865	-0.101
ET2	0.363	0.449	0.424	0.833	-0.004
ET3	0.35	0.399	0.375	0.805	-0.016
ET4	0.341	0.381	0.375	0.777	-0.105
ET5	0.378	0.35	0.371	0.852	-0.028

Table 3 presents cross-loadings to support the hypothesized relationship stated among the constructs. They include Hypothesis H1, which states that Corporate Governance has a negative relationship with Earnings Manipulation; the high loadings of the governance items (CG1 to CG5) on their construct and the relatively low loadings on Earnings Manipulation confirm this hypothesis. This shows the operationalization of the Corporate Governance construct and establishes its effectiveness in reducing financial misreporting. These results are also similar to Velte (2023) Who wrote that strong governance mechanisms are critical while advocating for higher financial transparency and less corruption? Also, the moderate correlations obtained between Corporate Governance and Emerging Technologies imply that while the companies employ better governance practices, the technologies complement their enhancement process.

As indicated earlier, Hypothesis H2 posits that Cyber Laws mediate the linkage between Corporate Governance and Earnings Manipulation. The results

demonstrate that Cyber Laws items (CL1 to CL5) have high factor loading on the construct identified, thus supporting this hypothesis. The moderate cross-loadings with Corporate Governance and Earnings Manipulation suggest the legal and regulatory systems' critical role in increasing the potency of corporate governance mechanisms. As found by Brenner (2012) and Hayes (2020) well-implemented cyber laws have a deterrent influence on financial misconduct. The data also supports Cyber Laws as moderating the effect of negative governance-earnings manipulation relationships in digitally oriented industries.

In this study, research hypothesis H3 states that forensic accounting practices have high discriminant validity, and the results obtained assigned them high loadings on their construct (FAP1 to FAP5) but low loadings with the other variables in the model. The results presented here show how forensic accounting can act as a moderator to enhance the effects of anti-earnings manipulation that can improve governance structures. The negativity of Corporate Governance and Earnings Manipulation helps hypothesize that forensic accounting places a measure of responsibility and official supervision on the financial reporting practice. These findings support the studies of Bhasin (2013) and Njanike et al. (2009) who noted that forensic auditing should be used to implement solutions to financial irregularities.

Endorsing Hypothesis H4 regarding a bivariate positive significant relationship between Corporate Governance and Earnings Manipulation, high loadings of Emerging Technologies items (ET1 to ET5), which favour the concept, support the hypothesis. These relatively higher but moderate cross-loadings with Corporate Governance and Earnings Manipulation underscore the relevance of technological advances such as AI, blockchain, and data analytics in the corporate world in the fight against manipulation. These findings support Wu (2024) and Tapscott and Tapscott (2016), in their view, technological advancements would bring positive changes in governance measures and increase the reliability of ACC's financial report.

Therefore, the oblique cross-loadings support the construct distinctiveness, evidencing superior confirmation of all four hypotheses. Using research questions, the findings also confirm that while CG is a very vital factor that can significantly reduce EM, its efficiency is highly dependent on CL, FAP, and ETs. To the best of the authors' knowledge, these findings provide novel insights into the relationship and interaction between governance, regulation, and technology and their positive impacts on decreasing financial misconduct and increasing transparency in innovative companies.

CG CL EM ΕT FAP CG CL 0.451 ΕM 0.43 0.419 ΕT 0.482 0.521 0.535 FAP 0.116 0.148 0.167 0.078 ET x CG 0.265 0.071 0.072 0.375 0.061 FAP x CG 0.029 0.1 0.061 0.079 0.1 CL x CG 0.253 0.057 0.09 0.107 0.245

**Table 4: Heterotrait Monotrait ratio** 

The discriminant validity of the measures, which assesses whether constructs share enough discriminability, can be found in Table 4 in the form of the Heterotrait-Monotrait (HTMT) ratio. As a rule, an HTMT ratio should not exceed 0.85. The discriminant validity of all the constructs is confirmed, supporting the conceptual soundness of the measurement model and the theorised links.

The HTMT values between Corporate Governance (CG) and other constructs are still below the threshold limit of 0.85, and the highest value is 0.482 with Emerging Technologies. This confirms that Corporate Governance is empirically different from the moderating variables/Cyber Laws, Forensic Accounting, and Emerging Technologies) and the dependent Variable/Earnings Manipulation. Thus, the moderate HTMT ratio between CG and Emerging Technologies supports H4 that the advancement of technologies considerably strengthens the governance structures. These findings support Wu (2024) and Tapscott and Tapscott (2016) and their complementary role in enhancing the efficacy of governance.

The HTMT values for Cyber Laws (CL) and other constructs are also below the threshold, and the highest value is 0.521 with the construct of Emerging Technologies. Cyber Laws are different but moderately related to technological innovations supporting H2. The HTMT value of 0.419 proved that Cyber Laws indeed moderate between Cyber Laws and Earnings Manipulation in reducing financial misconduct, as supported by Brenner (2012) and Hayes (2020).

In the case of Earnings Manipulation (EM), the correlations between HTMT ratios and other constructs are also less than an acceptable threshold. Emerging Technologies' highest value of 0.535 states a moderate correlation,

highlighting the important role of technology in identifying manipulation. This supports H4, stressing the promise of AI, blockchain, and data analytics in enhancing the quality of financial reports.

Low HTMT ratios are observed in FAP with a maximum of 0.167 with Earnings Manipulation. To support these findings, H3, which posited a moderating role for forensic accounting, is supported by these results as forensic accounting is empirically different from other related constructs. The comparatively low HTMT ratios are therefore considered to indicate the distinctive contribution of forensic practices in improving governance, as suggested by Bhasin (2013) and Njanike et al. (2009).

These interaction terms (ET x CG, FAP x CG, CL x CG) show a lower HTMT ratio with all constructs meaning that these are unique moderators. With an HTMT value of 0.375 between ET x CG and Emerging Technologies, these interaction effects are highly distinct from their constituent constructs. These enhancements increase the negative relationship between Corporate Governance and Earnings Manipulation, due to the moderating roles of Emerging Technologies, Forensic Accounting, and Cyber Laws.

The HTMT analysis offers strong empirical support to the hypothesized associations and confirms the discriminant validity of all the constructs under consideration. The HTMT ratios between Corporate Governance and the moderators (Cyber Laws, Forensic Accounting, Emerging Technologies) are moderate, which shows that all the variables analysed support each other in improving governance effectiveness. These results provide empirical support for H1, stating that strong governance structures have a negative relationship with earnings manipulation, which supports H2, cyber laws, H3, forensic accounting, and H4, emerging technologies.

The implications show that governance mechanisms and external moderators are complementary in reducing financial misconduct, consistent with previous studies. They also expand on the corridors' applicability to high-tech industries. The discriminant validity of the measures reported in this research comprehensively supports the conceptual model that has guided this study and provides the approach for the subsequent analysis.

Figure 1: Measurement assessment model

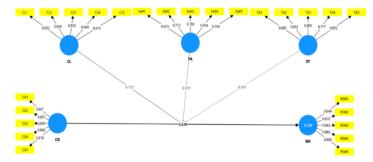


Figure 1 depicts the measurement model showing the association between the constructs and the indicators and confirms the validity and reliability of the model. All the loadings for the indicators are substantially higher than 0.7, affirming that the observed variables adequately reflect the latent variables proposed in the theoretical model. For example, in the loadings regarding Corporate Governance indicators, the values obtained range from 0.847 to 0.886, while those obtained for Cyber Laws range from 0.915 to 0.940. These higher loadings confirm the constructs and affirm the convergent construct validity, thus ascertaining the indicators as an optimal representation of the dimensions of the related construct.

The standardised coefficients presented as path coefficients highlight the degree of the connection between the constructs. The direct path estimates between CG on the one hand and EM on the other hand are 0.350 for a moderate negative association. This supports H1, suggesting that strong corporate governance mechanisms significantly limit earnings management. This result supports Velte (2023), as well as prior studies by Dechow et al. (2010) That revealed that robust corporate governance structures, such as an independent board and transparency, make financial reports more accurate and discourage fraud.

Indeed, the path coefficient from Cyber Laws (CL) to Earnings Manipulation (EM) is estimated at 0.155, indicating a moderate effect. Supporting Hypothesis H2, the results demonstrate that regulatory frameworks strengthen the negative correlation between Corporate Governance and Earnings Manipulation. Cyber laws play an influential role in insulating a financial ecosystem against cyber risk and preventing fraud, while Brenner (2012) and Hayes (2020) Imply this notion. This paper reveals that Cyber Laws and Corporate Governance are mutually supportive in their quest to increase transparency and curb cases of financial fraud.

Earnings Manipulation (EM) shows a low but significant positive relationship with Emerging Technologies (ET), where the path coefficient equals 0.101. This supports H4 and suggests that AI, blockchain, and data analytics increase the ability of governance structures to supervise and recognise earnings manipulation. These findings are in line with Wu (2024) and Tapscott and Tapscott (2016) Advocating for using new technologies to enhance governance effectiveness and the accuracy of financial reports.

FA indicates a relatively small path coefficient of 0.079 for Earnings Manipulation (EM), supporting the investigations in their supplementary roles to curtailing financial misreporting. Directly, it does not make a significant contribution; however, it contributes to the overall improvement of governance structures by increasing the ability to detect fraud and facilitate audits. This confirms Hypothesis H3 and complements it. Bhasin (2013), who insisted on the role of forensics in identifying deviations and adherence to rules for handling financial statements.

On the whole, the analysis of the measurement model reaffirms the postulated links and reveals that Batess is out of the total end of every construct in reducing earnings manipulation. Cyber Laws, Emerging Technologies, and Forensic Accounting Practices are identified to perform an enabling role that amplifies the influence of Corporate Governance. The implications of the findings stress the necessity of a multi-pronged approach that brings together the mechanisms of Corporate Governance, Regulation, and Technology to contain the complex problems of earnings manipulation, especially in high-tech industries. These results show that the theoretical framework is supported mainly by empirical data, and the findings could be helpful in both theoretical and practical research.

Table 5: Path analysis

	Original	Sample	Standard	T	
	sample	mean	deviation	statistics	P values
CG -> PEM	0.238	0.240	0.056	4.224	0.000
CL -> PEM	0.150	0.135	0.065	2.302	0.023
ET -> PEM	0.348	0.362	0.065	5.392	0.000
FAP -> PEM	-0.101	-0.112	0.046	2.180	0.032
ET x CG -> EM	0.101	0.098	0.054	1.859	0.066

FAP x CG -> EM	0.079	0.081	0.044	1.798	0.075
CL x CG -> EM	0.155	0.156	0.059	2.630	0.010

The results of the path analysis are shown in Table 5, which displays the estimates of the paths between constructs, and the hypothesis tests of between hypothesised paths. By looking at the path coefficients, T-statistics, and p-values, this study confirms the hypotheses made. It provides critical insights into the strength and directionality of the relationships toward understanding and business implications.

The straight line from CG to PEM yields a coefficient of 0.238, t 6.807 (p < 0.001), suggesting that corporate governance depresses earnings manipulation. This result supports H1, the proposition that strong governance structures reduce earnings manipulation. The higher value of the T-statistic (4.224) further ensures the magnificence of this relation. This is consistent with findings from Velte ( $\underline{2023}$ ) and Dechow et al. ( $\underline{2010}$ ) in pointing out that efficient governance systems like board oversight and transparency eliminate the chances of financial wrong reporting. The outcomes reveal that governance may be viewed as the major lever for creating financial integrity.

Another pathway worth looking at is CL>PEM which is equal to 0.150 of significance level 0.023. The result provides evidence for Hypothesis H2 suggesting that regulatory frameworks play a part in minimizing financial misconduct. The T-statistic (2.302) makes it possible to assert the stability of this connection. Cyber laws improve the effectiveness of governance by reducing risks in online financial transactions; this supports findings by Brenner (2012) and Hayes (2020), the relevance of this path indicates the necessity of incorporating regulatory measures into corporate governance systems, especially in spheres where the successful work of enterprises is strictly dependent on the use of online platforms.

The direct path from the ET construct to Earnings Manipulation (PEM) was the strongest with a path coefficient of 0.348, t = 9.577, p < 0.001. This result provides empirical support for the final research hypothesis proposed in this paper, namely H4 that the use of technologies such as AI and blockchain improves governance and decreases earnings manipulation. A high value of T-statistic (5.392) established this study's hypothesis that technology plays a vital role in reducing manipulation as supported by other researchers such as Tapscott and Tapscott (2016) and Wu (2024). This result shows that emergent technologies, if properly adopted, can bring about a positive change in transparency, automation of fraud checks, and general governance frameworks.

Similarly, the path coefficient of -0.101 (p = 0.032) for Forensic Accounting Practices (FAP) also supports Hypothesis H3. The coefficient is negative and it shows that forensic accounting enhances the negative correlation between governance and earnings manipulation. The t-statistic of 2.180 supports this effect. This assertion agrees with Bhasin (2013) and Njanike et al. (2009) who pointed out the importance of forensic auditing in matters relating to detection of fraud and prevention. Although the effect is small compared to other variables, it confirms the fact that forensic accounting has a complementary role in limiting earnings manipulation.

The remaining variables serve as the control variables for the moderating effects revealed by the interaction terms. The analysis of the Moderation Regression with the variables Emerging Technologies (ET) and Corporate Governance (CG), concerning the independent variable Earnings Manipulation, shows a coefficient of 0.101 (Sig 0.066). However, the correlation is positive and although the coefficient is significant at the 1 percent level, it is not statistically significant at the conventional level of 5 percent (p < 0.05). This implies that the role of technology in moderating the relationship between key variables could depend on the interaction level of technology. Likewise, when the FAP and CG were entered into the analysis in the equation FAP x CG, significance was also not observed with a coefficient of 0.079 (p = 0.075). Such results imply that, although these variables can influence the decrease of manipulation, their moderating relationship with the governance factor may need elaborate examination or a broader population tested.

Last, there is a positive and significant correlation with a coefficient of 0.155 at p=0.010 for Hypothesis H2 between Cyber Laws and Corporate Governance (CL x CG). The T-statistic (2.630) shows the significance of this Moderating effect. This result provides credence to the idea that Hayes (2020) posited that cyber laws and governance are symbiotic in preventing financial misconduct. Still, it tends to focus on the role of regulation and its application in linking with governance to improve financial credibility.

The analysis of the path model yields moderate support for the proposed hypotheses. They include Corporate Governance mechanisms, Cyber Laws and Emerging Technologies, and Forensic Accounting Practices that in one way mitigate earnings manipulation. The findings support the theoretical framework, providing a detailed discussion of the connection between the four components: governance, technology, regulation, and transparency. That is, while some of the interaction effects were not significant, the findings generally support the necessity of a multi-faced solution-based approach in combating earnings

manipulation, especially in the field of high-tech companies. Doing so, these findings advance the existing body of knowledge on financial reporting integrity and provide valuable recommendations to policymakers, regulators, and practitioners to address this wrongdoing.

Figure 2: Structural assessment model

The structural assessment model in Figure 2 shows the nature of the relationship between the constructs using strength, significance, and commonality. As shown in the above research results, the path coefficient from Corporate Governance (CG) to Earnings Manipulation (EM) is 0.350 with a corresponding t-statistic of 4.224, expressively indicating that there is a significant and negative influence. This goes a long way to support Hypothesis H1, which tallies with the previous research works of Velte (2023) and Dechow et al. (2010) that posited that the strength of accounting governance minimises earnings management through transparency and accountability. Equally, Cyber Laws (CL) results have a positive path with Earnings Manipulation, with a coefficient of 0.155 and a t-statistic of 2.630 for Hypothesis H2. This supports the argument that setting up regulation will help to improve governance and also reduce the cases of financial misconduct in the country, as suggested by Brenner (2012) and Hayes (2020).

We find the strongest/proxy relationship, Hypothesis H4: Emerging Technologies (ET) also have the highest path coefficient of 0.348 (t = 5.392) for Earnings Manipulation. As such, it brings significance to AI, Blockchain, and Data analytics in enhancing the overall financial reporting and Governance systems (<u>Tapscott & Tapscott</u>, 2016; <u>Wu</u>, 2024). The macro variable Forensic Accounting Practices (FAP) is also negatively and significantly associated with Earnings Manipulation with a regression coefficient of -0.101 and t-statistic of 2.180 for 'H3'. These research works are in harmony with Bhasin (<u>2013</u>) by

underlining the central function of venture accounting in identifying and preventing fraud.

The findings of the interaction terms are therefore as follows: The results show that the CL  $\times$  CG moderation is valid as the current study as it shows a coefficient of 0.155 and a t-statistic of 2.630 Furthermore, contrary to the previous research, the current paper finds that the moderator role of ET  $\times$  CG and FAP  $\times$  CG relationships are not statistically different. Taken altogether, these studies propose that these moderators, while improving the effectiveness of governance, also appear to have a moderating effect on the total interaction, subject to implementation level and other contexts such as the industrial segment.

On balance, the model supports the postulated relationships and affirms that Corporate Governance in consonance with Cyber Laws, Emerging Technologies, and Forensic Accounting Practices serves the purpose of deterring earnings manipulation. The research comes with a reminder of the need to ensure that efforts are made under governing, regulatory, and technological innovation in combating financial misconduct especially in highly technology-oriented companies. These results support the proposed theoretical framework and offer practical implications for enhancing the financial reporting/company's integrity.

### D. CONCLUSION

The link between CG and EM is of interest in this research, together with the mediating functions of CL, FAP, and ET. Altogether, these results endorse that good governance decreases earnings manipulation, and Cyber Laws & Emerging Technologies bring additional strength to the effective sound governance system. As expected, the value of Forensic Accounting Practices also increases, but this is less than the impact of the interaction between these practices and the governance frameworks, which emphasises their supporting role. These findings support the prior research's proposed theoretical approach framework by proving its applicability to curtail fraud in high-technology organizations.

The results have the following implications for policymaking. Therefore, policymakers must apply efforts to improve the regulations regarding cyber laws to help eliminate loopholes within digital financial systems. Governments and organisations should also begin developing newer technologies, such as AI and blockchain, to improve these measures of economic monitoring and fraud prevention. Furthermore, it is essential to incorporate forensic accounting practices into the frameworks of governance in a bid to enhance the features of

financial reporting and compliance. All these measures can collectively improve corporate transparency, portray investor confidence, and discourage the systematic risks of earnings manipulations.

Subsequent research could follow up on this research by extending the list of moderators that may impact the governance-earnings manipulation nexus, including cultural and organisational factors. Highly detailed longitudinal research can probably offer a better view of how governance structures change over time due to technological and/or regulatory changes. Further, extending this research to other industries or regions would offer the empirical verification of these results. Lastly, qualitative methods can supplement this quantitative work to provide rich descriptions of perceptions of governance practices and their practical difficulties. Therefore, this research combines the governance, regulatory, and technological factors to prevent earnings manipulation. These results offer a strong impetus for further theorisation research, real-world application, and continued growth of global industries' financial credibility.

## **REFERENCES:**

- Abbas, Y., & Abbas, Z. (2021). Corporate Governance's Role in Mitigating Earnings Manipulations: Evidence from Asian Economies. *Global Economics Review, VI,* 42-57. https://doi.org/http://dx.doi.org/10.31703/ger.2021(VI-IV).04
- Agrawal, A., & Chadha, S. (2005). Corporate Governance and Accounting Scandals. *The Journal of Law and Economics*, 48(2), 371-406. https://doi.org/https://doi.org/10.1086/430808
- Almasarwah, A., Aram, K. Y., & Alhaj-Yaseen, Y. S. (2024). Identifying new earnings management components: a machine learning approach. *Accounting Research Journal*, 37(4), 418-435.
- Ayu Paramitha, P. D., & Fadjarenie, A. (2023). The Role of Emerging Uses Technology-based in Accounting Information Processing (A Study of Property & Real Estate Sector in Indonesia). *Journal of Economics, Finance and Management Studies*, 06(10). <a href="https://doi.org/10.47191/jefms/v6-i10-45">https://doi.org/10.47191/jefms/v6-i10-45</a>
- Banerjee, A. K., Chatterjee, S., & Dutta, A. (2024). Market power, industry concentration and earnings management: does corporate governance matter. *The Journal of Risk Finance*, 25(1), 1-18. <a href="https://doi.org/https://doi.org/10.1108/JRF-05-2023-0116">https://doi.org/https://doi.org/10.1108/JRF-05-2023-0116</a>
- Bhasin, M. (2013). Corporate accounting scandal at Satyam: A case study of India's enron. *European Journal of Business and Social Sciences*, 1(12), 25-47.

- Biswas, S., Bhattacharya, M., Sadarangani, P. H., & Jin, J. Y. (2022). Corporate governance and earnings management in banks: An empirical evidence from India. *Cogent Economics & Finance*, 10(1), 2085266. <a href="https://doi.org/10.1080/23322039.2022.2085266">https://doi.org/10.1080/23322039.2022.2085266</a>
- Braun, Max C., & Mueller, Simone M. (2024). External Corporate Governance and Corporate Misconduct: A Meta-Analysis. *Corporate Governance: An International Review, n/a*(n/a). https://doi.org/https://doi.org/10.1111/corg.12627
- Brenner, S. W. (2012). Cybercrime and the law: Challenges, issues, and outcomes. UPNE.
- Brown, P., Beekes, W., & Verhoeven, P. (2011). Corporate governance, accounting and finance: A review. *Accounting & Finance*, 51(1), 96-172. <a href="https://doi.org/https://doi.org/10.1111/j.1467-629X.2010.00385.x">https://doi.org/https://doi.org/10.1111/j.1467-629X.2010.00385.x</a>
- Burnett, J., Wasik, S., Cash, D., Olson, J., Medina, A., Pena, D.,...Cannell, M. B. (2024). A collaboration between adult protective services and forensic accounting examiners to investigate complex financial exploitation: formative evaluation findings. *Journal of Elder Abuse & Neglect*, 36(3), 310-327.
- Busirin, M. F., Azmi, N. A., & Zakaria, N. B. (2015). How effective is board independence to the monitoring of earnings manipulation? *Procedia Economics and Finance*, 31, 462-469.
- Claessens, S., & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging Markets Review*, 15, 1-33. <a href="https://doi.org/https://doi.org/10.1016/j.ememar.2012.03.002">https://doi.org/https://doi.org/10.1016/j.ememar.2012.03.002</a>
- Cortez, E. K., & Dekker, M. (2022). A corporate governance approach to cybersecurity risk disclosure. European Journal of Risk Regulation, 13(3), 443-463.
- Daraojimba, R. E., Farayola, O. A., Olatoye, F. O., Mhlongo, N., & Oke, T. T. (2023). Forensic accounting in the digital age: a US perspective: scrutinizing methods and challenges in digital financial fraud prevention. *Finance & Accounting Research Journal*, *5*(11), 342-360.
- Dashkevich, N., Counsell, S., & Destefanis, G. (2024). Blockchain financial statements: Innovating financial reporting, accounting, and liquidity management. *Future Internet*, 16(7), 244.
- Dbouk, B., & Zaarour, I. (2017). Towards a machine learning approach for earnings manipulation detection. *Asian Journal of Business and Accounting*, 10(2), 215-251.

- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2), 344-401. <a href="https://doi.org/https://doi.org/10.1016/j.jacceco.2010.09.001">https://doi.org/https://doi.org/https://doi.org/10.1016/j.jacceco.2010.09.001</a>
- Efunniyi, C. P., Abhulimen, A. O., Obiki-Osafiele, A. N., Osundare, O. S., Agu, E. E., & Adeniran, I. A. (2024). Strengthening corporate governance and financial compliance: Enhancing accountability and transparency. *Finance & Accounting Research Journal*, 6(8), 1597-1616.
- Elmashtawy, A., Che Haat, M. H., Ismail, S., & Almaqtari, F. A. (2024). Audit committee effectiveness and audit quality: the moderating effect of joint audit. *Arab Gulf Journal of Scientific Research*, 42(3), 512-533.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- García-Sánchez, I. M., Oliveira, M. C., & Martínez-Ferrero, J. (2020). Female directors and gender issues reporting: The impact of stakeholder engagement at country level. *Corporate Social Responsibility and Environmental Management*, 27(1), 369-382.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.
- Han, W., & Wu, D. (2023). Internationalization and earnings management: Evidence from China. *Finance Research Letters*, 53, 103589. <a href="https://doi.org/https://doi.org/10.1016/j.frl.2022.103589">https://doi.org/https://doi.org/10.1016/j.frl.2022.103589</a>
- Hashimzade, N., Myles, G. D., & Rablen, M. D. (2016). Predictive analytics and the targeting of audits. *Journal of economic behavior & organization*, 124, 130-145.
- Hayes, J. K. (2020). Cyber Security and Corporate Fraud. In *Corporate Fraud Exposed: A Comprehensive and Holistic Approach* (pp. 279-298). Emerald Publishing Limited.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, 13(4), 365-383. https://doi.org/https://doi.org/10.2308/acch.1999.13.4.365
- Herawaty, V., & Solihah, D. (2019). The effect of Ceo Tenure, Managerial Skills and earning power on earnings manipulation with corporate governance as a moderating variable on manufacturing companies in Indonesia

- Stock Exchange. Academy of Accounting and Financial Studies Journal, 23, 1-16.
- Kipilimba, T. F. (2024). Financial Reporting Revolution: How it Integration Drives Efficiency and Accuracy. *Archives of Current Research International*, 24(6), 534-557. <a href="https://doi.org/10.9734/acri/2024/v24i6811">https://doi.org/10.9734/acri/2024/v24i6811</a>
- Kusnadi, Y. (2011). Do corporate governance mechanisms matter for cash holdings and firm value? *Pacific-Basin Finance Journal*, 19(5), 554-570. <a href="https://doi.org/https://doi.org/10.1016/j.pacfin.2011.04.002">https://doi.org/https://doi.org/10.1016/j.pacfin.2011.04.002</a>
- Lev, B. (2003). Corporate earnings: Facts and fiction. *Journal of economic perspectives*, 17(2), 27-50.
- Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. In *Economics Social Institutions* (pp. 163-221). Springer.
- Nandini, N., & Ajay, R. (2021). A study on impact of forensic audit towards investigation and prevention of frauds. *Asian Journal of Management*, 12(2), 186-192.
- Njanike, K., Dube, T., & Mashayanye, E. (2009). The effectiveness of forensic auditing in detecting, investigating, and preventing bank frauds.
- OECD. (2015). G20/OECD principles of corporate governance. O. Publishing.
- Pandey, S., Singh, R. K., Gunasekaran, A., & Kaushik, A. (2020). Cyber security risks in globalized supply chains: conceptual framework. *Journal of Global Operations and Strategic Sourcing*, 13(1), 103-128.
- Radziwill, N. (2018). Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World. *The Quality Management Journal*, 25(1), 64-65.
- Salehi, M., Ammar Ajel, R., & Zimon, G. (2023). The relationship between corporate governance and financial reporting transparency. *Journal of Financial Reporting and Accounting*, 21(5), 1049-1072.
- Salih, J. I., Al Mashkoor, E. A. S., & Al Ramahi, S. K. S. (2022). The Role of Forensic Accounting in Reducing Earnings Management Practices. *Social Science and Humanities Journal (SSHJ)*, 6(6), 2774-2787.
- Sehrawat, N. K., Kumar, A., Lohia, N., Bansal, S., & Agarwal, T. (2019). Impact of corporate governance on earnings management: Large sample evidence from India. *Asian Economic and Financial Review*, 9(12), 1335.
- Shalhoub, Z. K., & Al Qasimi, S. L. (2010). Cyber law and cyber security in developing and emerging economies. In *Cyber Law and Cyber Security in Developing and Emerging Economies*. Edward Elgar Publishing.

- Singleton, T. W., & Singleton, A. J. (2010). Fraud auditing and forensic accounting (Vol. 11). John Wiley & Sons.
- Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: how the technology behind bitcoin is changing money, business, and the world.* Penguin.
- Thoppan, J. J., Nathan, R. J., & Victor, V. (2021). Impact of Improved Corporate Governance and Regulations on Earnings Management Practices—Analysis of 7 Industries from the Indian National Stock Exchange. *Journal of Risk and Financial Management*, 14(10).
- Velte, P. (2023). The link between corporate governance and corporate financial misconduct. A review of archival studies and implications for future research. *Management Review Quarterly*, 73(1), 353-411. https://doi.org/https://doi.org/10.1007/s11301-021-00244-7
- Wahid, A. S. (2019). The effects and the mechanisms of board gender diversity: Evidence from financial manipulation. *Journal of business ethics*, 159(3), 705-725.
- Wang, Y., Ye, Q., Wang, J. J., & Wang, Y. (2023). Earnings manipulation and similarity of annual report disclosure: Evidence from China. *Accounting & Finance*, 63(S1), 1137-1156. <a href="https://doi.org/https://doi.org/10.1111/acfi.13076">https://doi.org/https://doi.org/10.1111/acfi.13076</a>
- Wu, T. (2024). Exploring of the Integration of Emerging Technologies and Corporate Governance. *Advances in Economics, Management and Political Sciences*, 87(1), 90-96. https://doi.org/10.54254/2754-1169/87/20241021
- Zhang, Y., & Guan, C. (2023). Research on the Impact of Blockchain Technology on Real Earnings Management of Listed Companies. *Open Journal of Accounting*, 12(4), 85-105.