Cuadernos de Economía (2024) Volume 47, Issue 134, 53-67

Asociación Cuadernos de economía

Cuadernos de economía

www.cude.es

ARTÍCULO

The Unravelling Abnormal Resignations of Independent Directors: An Information System Analysis of Influencing Factors and Market Reactions

Lijia Wu[1], Nanyan Dong[2]*

[1] PhD Candidate, International College of Krirk University, Bangkok, Thailand, 10220
ORCID iD: https://orcid.org/0009-0004-3488-3232
Email: ldzywlj@126.com
[2] Associate Professor, International College of Krirk University, Bangkok, Thailand, 10220
ORCID iD: https://orcid.org/0000-0001-7547-4436
Email: dongny@xjtu.edu.cn

**Correspondence:* *dongny@xjtu.edu.cn*

Keywords:
Corporate Governance, Independent Directors, Financial Metrics, Governance Practices, Information Systems.

The governance structures of contemporary organizations are increasingly challenged by financial uncertainties, evolving ownership patterns, heightened scrutiny of ethical financial practices, and the expanding influence of information systems in decision-making. Independent directors, who play a crucial role within these governance frameworks, often face complex and multifaceted dilemmas, including the significant decision of whether to resign from their positions. This study aims to comprehensively investigate the variables influencing independent directors' resignation decisions, focusing on the interplay between financial metrics such as Return on Equity and Earnings Management, audit opinions, major litigation, changes in the largest shareholder, liquidity ratios, and governance components like information system functionality. The study seeks to enhance existing corporate governance theory and provide valuable insights for the development of effective governance structures. Employing a qualitative approach, the research conducted eight semi-structured interviews followed by a three-step thematic analysis to explore the lived experiences of independent directors and the intricate factors affecting their resignation decisions. The findings highlight the considerable influence of financial metrics, governance challenges, and the role of information systems on the likelihood of independent director resignations. The interaction of these dimensions reveals a complex landscape that directors navigate, underscoring the necessity of an integrated approach to governance analysis. This research offers novel insights by bridging gaps in current literature and presenting a holistic perspective on the factors driving director resignations. The study's originality lies in its examination of the interconnected financial, governance, and technological dimensions, contributing both to academic discourse and practical governance strategies. The implications of this research are significant, providing guidance for organizations seeking to strengthen their governance structures, enhance board effectiveness, and adeptly manage the complexities of the modern business environment.

https://doi.org/10.32826/cude.v47i134.1405

Introduction

The complex dynamics surrounding independent director resignations present a compelling area of study within corporate governance, where directors' decisions significantly impact a company's overall health, stakeholder perceptions, and strategic direction. Given the backdrop of financial uncertainties, governance challenges, and the increasing integration of information technology in decision-making processes, a comprehensive examination of these factors is imperative. This study investigates the multifaceted determinants of independent director resignations, with a particular emphasis on the role of information technology in governance (Xing et al., 2023). As organizations increasingly leverage information systems for governance management, these technologies play a critical role in facilitating rapid decision-making, transparent communication, and the provision of real-time financial data in contemporary corporate settings. This research explores how information system analysis, financial metrics, and governance issues intersect to influence independent director resignations, thereby enriching the understanding of board dynamics (Muthuswamy, 2024; Wijayanti & Setiawan, 2023).

Governance structures, historically voluntary, now necessitate sophisticated information systems, with technological advancements such as big data, artificial intelligence, and analytics transforming corporate operations (Radonjić et al., 2022). The transparency, efficiency, and quality of information systems significantly shape the roles and challenges faced by independent board directors, presenting new governance complexities and opportunities. The convergence of information technology integration, intricate financial measures, and evolving governance practices generates novel challenges within corporate governance frameworks (He et al., 2023). Key financial indicators, such as liquidity ratios and Return on Equity (ROE), provide insights into a company's financial health, while governance aspects, including audit opinions and changes in the largest shareholder, further define the governance landscape.

Information systems serve as a critical link between boards, enabling data-driven decision-making processes. This study elucidates the factors influencing independent director resignations through an analysis of the interconnected roles of information systems, financial metrics, and governance components (Ahmadi, Widhiastuti, & Helmy, 2022; Lu et al., 2022). As technology's influence on governance expands, a thorough examination of how information systems mediate governance practices and financial indicators is essential to understanding the evolving decision-making environment of directors. This study utilizes information system analysis to explore the factors influencing independent director resignations, focusing on the interplay between finance, governance, and technology within corporate boards. ROE is a key financial metric assessing profitability and capital allocation, as highlighted by Siueia et al. (2019).

However, the relationship between independent director resignations, ROE, and the mediating role of information technology remains underexplored. Governance ethics are compromised when earnings management manipulates financial reporting to achieve targeted outcomes, a practice linked to board resignations as noted by Goodell et al. (2023). This research examines how information system analysis shapes directors' awareness and concerns regarding aggressive earnings management practices. Audit opinions significantly influence governance and can precipitate director resignations, as argued by Hu et al. (2020). This study investigates the impact of information systems on audit opinions and their subsequent effects on independent director resignations.

Additionally, legal and psychological challenges associated with major litigation have been identified as critical factors driving director resignations (Abd Aziz, Rahim, & Aziz, 2022; Song et al., 2021). This research delves into the psychological impacts of significant lawsuits on directors and examines how information systems manage these complex scenarios. Changes in substantial shareholders are known to influence corporate governance dynamics. According to Cherukunnath & Singh (2022), shifts in ownership structures impact board dynamics, and this study explores how information technology facilitates communication regarding these shareholder changes. Communication and engagement during board meetings are also crucial, with infrequent meetings leading to communication breakdowns and potential resignations, as noted by Bai et al. (2023). This study investigates how communication challenges affect independent director resignations and the role of information technology in mitigating these issues. Furthermore, financial ratios such as Asset-Liability and Quick Ratios can significantly impact management decisions and board dynamics. Kim & Lee (2022a) suggest that variations in these ratios influence board decision-making processes. This research analyses how changes in these financial ratios, as interpreted through information system analysis, affect the likelihood of independent director resignations, providing a comprehensive understanding of the multifaceted factors at play.

Previous research has clarified several key aspects of corporate governance. Rehan et al. (2023) highlight that ROE enhances shareholder value and contributes to firm performance. In the context of Earnings Management, Zadeh et al. (2023) explore directors' concerns and the ethical implications of financial reporting. Saheruddin & Soedarmono (2022) investigated the role of audit opinions in governance, emphasizing the critical importance of audit quality in addressing governance challenges. Chang et al. (2021) examined the psychological and legal risks faced by directors in the context of significant litigation, while Chintrakarn et al. (2022) analysed the impact of substantial shareholder changes on board dynamics within corporate governance. Najam et al. (2022) assessed corporate decision-making, liquidity measures such as the Quick Ratio, and market risk, whereas Chen et al. (2023) focused on the Asset-Liability Ratio and its influence on financial management.

Despite these insights, there remains a need for further investigation into the interconnections between financial indicators, governance variables, information systems, and independent director resignations. Addressing these research gaps necessitates a multifaceted approach. The primary objective of this study is to deepen the understanding of the complex processes that lead to independent directors' resignations from corporate boards. By employing a comprehensive methodology that integrates financial metrics, governance practices, and the performance of information technology, this research aims to provide a thorough analysis of the factors influencing directors' decisions to resign. The study seeks to contribute to the literature by elucidating the interconnected nature of these variables and offering actionable insights for enhancing governance frameworks. The study aims to:

1. Assess the impact of significant shareholder changes,

audit opinions, audit frequency, asset-liability ratios, board meeting frequency, and earnings management on the likelihood of independent director resignations.
2. Examine the relationship between these financial metrics and governance characteristics, and explore the influence of information systems on directors' decisions to resign.

This research has significant implications for both governance theory and practice. A comprehensive analysis of the technological, financial, and governance factors influencing independent directors' resignations can enhance corporate governance frameworks. By addressing existing gaps and integrating diverse perspectives, the study contributes to a deeper understanding of the complex decision-making processes within boards, offering valuable insights for scholars. The findings provide practical data for organizations seeking to strengthen their governance structures. By examining the factors contributing to director resignations, this research aims to improve board performance, enhance communication, and address financial and governance challenges. Ultimately, the study's insights can help refine governance strategies to better align with the complexities of contemporary business environments.

Literature Review

Information systems significantly influence organizational dynamics and decision-making processes, playing a crucial role in corporate governance. Advanced information systems enhance operational efficiency, communication, and process management in digital enterprises, thereby improving strategic planning and problem-solving capabilities. The integration of information technology with organizational design has been explored as a means to achieve greater agility and flexibility. In an increasingly dynamic corporate landscape, understanding how information technologies bolster organizational resilience and responsiveness is essential. According to Tan & Wang (2023), information systems impact corporate governance by enhancing compliance and minimizing risks.

Analysts of information systems have investigated the role of technological infrastructure in shaping decision-making processes. Han et al. (2021) highlight that effective information system analysis can uncover patterns that influence strategic decisions, thereby providing insights into organizational performance. Consequently, scholars emphasize the importance of examining information system functions within governance contexts. The audit should encompass both technical elements and ensure that the information system aligns with business objectives and governance regulations. As organizations navigate the contemporary business environment, it is crucial to comprehend how information systems influence stakeholder behaviour and the flow of information. Wu et al. (2024) highlight the importance of analysing the dynamics of information systems to enhance corporate governance, focusing on the optimization, design, and implementation of these systems.

Return on Equity

The complex interplay between financial performance and governance is illuminated by examining the effect of ROE on independent director resignations within the context of information system analysis. Information systems play a crucial role in generating, processing, and disseminating financial data, which significantly influences organizational decision-making (Alruwili & Elsawy, 2024; Nissim, 2022). To understand the relationship between ROE and independent director resignations, it is essential to explore how information technologies enhance financial transparency, data quality, and stakeholder communication regarding financial performance evaluations. The impact of information systems on financial reporting affects both ROE and director resignations. These systems facilitate the calculation of ROE and the analysis of financial data. Research indicates that modern information systems provide real-time financial reporting, which enables directors to identify financial trends and make informed decisions (Chen, 2023). Effective information systems enable directors to detect and address earnings management promptly. Without reliable financial data provided by information systems, directors may face difficulties in assessing the organization's financial health, leading to governance challenges and, in extreme cases, resignations. Thus, the influence of information systems on director resignations and ROE extends beyond mere financial reporting (Aniello et al., 2021).

Effective corporate governance relies on robust communication and transparency, areas where IT plays a crucial role. Information systems facilitate the provision of reliable financial data, which is essential for communication among boards, management, and shareholders. Variations in ROE can signal financial challenges or successes, underscoring the importance of IT-supported communication. Directors, who need to negotiate with stakeholders and manage finances, depend on accurate and timely data (Boyer et al., 2012). Perceptions of inadequate transparency or difficulty accessing reliable financial information due to governance issues can increase the likelihood of director resignations. Information systems enhance strategic decision-making, influencing ROE and director resignations beyond the scope of financial reporting (Parikh et al., 2023). By offering a comprehensive view of operations, integrated information systems help directors align financial strategies with organizational goals. Utilizing historical financial data and real-time operational insights, directors can make informed decisions that affect ROE. Factors such as cost management, market expansion, and technology investments can influence ROE (Chung et al., 2023). Strategic decision-support systems may bolster directors' confidence in financial management, potentially reducing resignations related to financial issues.

Moreover, risk management supported by information systems plays a significant role in both ROE and director resignations (Chang et al., 2021). Accurate and timely data from information systems enhance risk management practices, helping to identify and address potential risks associated with ROE fluctuations, liquidity challenges, or aggressive financial behaviour. Directors equipped with a thorough understanding of risks can take proactive financial and governance measures to protect the organization (DasGupta, 2022; Mariño & Montalvo, 2024). Conversely, inadequate information systems can obscure risks, leading to unexpected financial issues and potentially prompting board resignations.

Earnings Management

Information technology introduces complexity into earnings management, which involves manipulating financial data to enhance performance metrics. The role of information systems in detecting, preventing, and responding to earnings management provides insight into the factors behind independent directors' resignations. Advanced information systems equipped with analytics and machine learning algorithms can identify anomalies in financial data that may indicate earnings manipulation (Gao & Huang, 2021; Zhao et al., 2023). These technologies systematically analyse extensive databases to detect irregularities that could signal fraudulent earnings practices. Directors rely on accurate and timely data to uphold financial integrity and avoid resignations due to unethical financial practices. Effective information systems are essential for detecting earnings management and ensuring transparency. By enhancing the transparency and communication of financial data, information technology can influence independent directors' approach to earnings management (Borralho et al., 2022). Comprehensive information systems provide directors with real-time financial data and disclosures, supporting informed decision-making and reinforcing financial integrity.

Directors are obligated to disclose earnings management and corporate financial information. Ineffective use of information technologies for transparent financial reporting can lead to directors failing to detect and address earnings management issues, which may undermine trust and exacerbate governance problems, potentially resulting in resignations (Wu & Dong, 2021). The effectiveness of system detection and prevention mechanisms is crucial in managing earnings manipulation and influencing director resignations. Integrated information systems with robust internal controls and security measures enhance financial integrity by restricting unauthorized access to and manipulation of financial data, thereby mitigating earnings management practices. These advanced systems foster trust in financial data, reducing the likelihood of resignations due to unethical financial practices (Goodell et al., 2023). The interplay between director resignations, earnings management, and information systems underscores the importance of strategic decision-making. Directors rely on real-time operational and financial data to make informed decisions that align with organizational objectives (Graham et al., 2022). In the absence of such advanced tools, directors may depend on historical data, leaving them susceptible to financial manipulation.

Audit Opinions

External audits evaluate a company's financial statements and are deeply interconnected with the efficacy of information systems, governance structures, and organizational decision-making. Analysing how information systems influence auditing processes, the reliability of financial information, and the actions and resignations of independent directors is essential (Liang et al., 2022). Information system analysis in the context of audit opinions involves examining how technology supports and enhances auditing. Modern information technology enables auditors to process financial data more efficiently, utilizing computer-assisted audit tools to analyse large datasets, identify anomalies, and perform complex tests, thus improving the precision and comprehensiveness of audits (Chy et al., 2021). The quality of audit opinions is closely linked to the auditability of information systems. An integrated information system that facilitates efficient data retrieval and analysis can simplify the auditing process, reducing the likelihood of qualified or adverse audit opinions that could lead to governance issues and director resignations. The reliability of financial information provided by information systems directly impacts audit outcomes and governance effectiveness. Verification solutions within information systems assist auditors in achieving unqualified audit opinions, thereby affirming the accuracy and fairness of financial statements (Luo & Liu, 2023).

Information systems play a crucial role in maintaining data integrity throughout the process of transaction recording and financial report generation. Internal controls and the presence of data anomalies can result in qualified or adverse audit opinions. Directors faced with unsatisfactory audit outcomes may encounter governance challenges that could lead to their resignation. The influence of information technology extends to audit results and the communication of recommendations (Li & Liu, 2023). Comprehensive information systems facilitate the effective communication of audit results, enabling directors to reach consensus on governance improvements and remedial actions. Enhanced communication technology can expedite issue resolution and potentially reduce the likelihood of director resignations. Conversely, inadequate information systems that fail to effectively disseminate audit results may exacerbate governance challenges and increase the incidence of governance-related resignations (Cheng & Sun, 2019). To positively impact audit outcomes, information systems must comply with regulatory and auditing standards. Unqualified audit opinions that affirm adherence to accounting and legal requirements are crucial for maintaining compliance in complex regulatory environments.

Major Litigation

Significant litigation can affect governance and IT's role in legal matters. To understand how large litigation events impact independent director resignations, it is essential to examine how information systems manage, communicate, and mitigate legal risks. Effective information systems support legal processes, organize data, and enhance organizational communication. According to Sinyard et al. (2022), well-integrated information systems aid firms in managing major lawsuits. These systems facilitate electronic evidence management and e-discovery, enabling advanced IT to collect, process, and present evidence in court, thus assisting companies in defending themselves and making informed decisions during significant disputes (Shuya & Zainal, 2022; Tao et al., 2023). Robust e-discovery systems help directors understand the legal implications of significant events, reducing resignations due to uncertainty. Transparent information platforms enhance organizational communication and management of major legal issues (Heaney et al., 2021). Comprehensive systems enable legal teams, directors, and stakeholders to monitor legal processes, collaborate on strategies, and access real-time data, aiding in litigation tracking, financial impact analysis, and strategic decision-making.

Changes in the Largest Shareholder

Understanding how information system analysis impacts corporate governance is crucial amid significant shareholder changes. It is essential to examine how information systems influence communication, decision-making, and governance flexibility during these transitions (Ho & Chang, 2022). Information systems manage ownership data, support communication, and help directors assess and adapt to new shareholder structures (Dordi et al., 2023). They facilitate smooth transitions, reduce disputes, and aid directors in managing governance issues and interacting with new shareholders (Lee, 2022). Advanced systems support strategic decision-making by analysing scenarios and dynamic ownership changes, thus minimizing resignations due to governance conflicts (Li et al., 2020; Ponce-de-León, Gértrudix-Barrio, & Sánchez-Parra, 2022). Effective information systems enable directors to understand new major shareholders' goals and adjust governance strategies accordingly (Fan et al., 2022). Directors can leverage data to tailor their strategies according to shareholders' voting behaviours, involvement levels, and governance preferences. Utilizing comprehensive analytics and data enables directors to make informed adjustments to ownership structures, thereby mitigating the risk of governance misalignment and subsequent resignations.

Number of Board Meetings

Understanding the impact of information system analysis on board meeting frequency and director resignations is vital for effective corporate governance. Analysis of board meeting data focuses on scheduling, coordination, and documentation technologies. Integrated information systems enhance board meeting logistics, improve communication, and ensure the accuracy of information provided to directors. Goud (2022) highlights that information systems significantly improve board processes, particularly meeting management. These systems facilitate the coordination of meetings, streamline scheduling, and address logistical issues, which can help reduce resignations related to scheduling conflicts or availability.

Advanced information systems also support essential communication by providing directors with timely access to documents, reports, and data before, during, and after meetings. Effective information sharing through these systems enables board members to make well-informed strategic decisions and fosters collaboration, thereby decreasing resignations due to communication-related challenges (Brodin & Renblad, 2020; Contreras-Cruz et al., 2023). Information systems enhance decision-making during board meetings by enabling directors to evaluate and share real-time data. Decision support tools assist in analysing options, identifying risks, and planning strategically, thus improving the effectiveness of board meetings. Such technologies facilitate quicker and more informed decision-making, potentially reducing board resignations (Pang et al., 2020). Additionally, information systems play a crucial role in documenting and recording board meetings, including conversations, follow-up actions, and assigned responsibilities through comprehensive meeting minutes and decision logs.

Quick Ratio

Changes in the quick ratio, which reflect a company's liquidity and capacity to meet short-term obligations, can influence independent director resignations. Information systems play a critical role in corporate governance, financial reporting, and decision-making by facilitating the collection, processing, and reporting of financial data related to the quick ratio (Lee, 2023). Effective information systems enhance the accuracy and speed of financial reporting, which is vital for governance oversight and decision-making (Elkins et al., 2021). Advanced information systems improve the efficiency and precision of financial reporting by streamlining data collection and processing. Directors who utilize sophisticated financial reporting systems can rely on accurate quick ratio computations, thereby mitigating financial mismanagement and reducing the likelihood of resignations due to inaccuracies (Goodell et al., 2023).

The quick ratio significantly impacts organizational decision-making, as information systems provide real-time financial data that aid in managing liquidity. Dynamic financial analysis and scenario planning, supported by robust decision support systems, enable directors to address liquidity issues and develop strategies for managing the quick ratio. Such systems foster strategic governance and may help decrease resignations related to financial risk management (Newton et al., 2023). Effective communication is crucial for timely director resignations, and information systems enhance this process. Comprehensive systems provide directors with financial reports and analysis, enabling better understanding of quick ratios and liquidity control (Tan, 2023). Transparent communication facilitated by IT can improve governance and reduce resignations related to financial communication issues.

Asset-Liability Ratio

The Asset-Liability Ratio reflects a business's financial stability and risk. Information systems enhance financial reporting, decision-making, and governance, which can explain how changes in this ratio affect independent director resignations. Advanced systems improve data collection and reporting, ensuring accuracy and efficiency (Cheung, 2023). Reliable financial data helps reduce mismanagement and resignation risks. Additionally, real-time financial data from these systems supports effective risk management and strategic governance, potentially minimizing resignations related to financial instability (Du et al., 2023; Gale et al., 2022). The relationship between the Asset-Liability Ratio and director resignations is enhanced by effective communication through information systems. Comprehensive information systems deliver crucial financial reports and analyses, facilitating informed discussions on the Asset-Liability Ratio and financial strategies (Skuban-Eiseler et al., 2023; Worrachananun, 2022). Transparent information systems can improve collaboration among directors, potentially reducing resignations related to financial communication issues.

Methodology

This qualitative study investigates the intricate relationship between financial indicators, information systems, and independent director resignations. Qualitative methods, emphasizing participant perspectives and contextual understanding, are particularly suited for exploratory research into complex and human-centred phenomena. The study examines how financial variables influence information systems and impact director resignations, primarily through semi-structured interviews that allow for in-depth, focused discussions. Targeting finance, IT, and corporate governance experts, this purposive sampling approach ensures the relevance of participants' insights, enhancing the understanding of factors contributing to independent director resignations. The diverse viewpoints of participants provide a comprehensive view of financial governance and its implications for independent directors, executives, and decision-makers.

Eight semi-structured interviews were conducted, balancing the depth of inquiry with the practical constraints of qualitative research. Participants were selected through professional networks, industry associations, and referrals, as detailed in Table 1. This approach aimed to capture a range of perspectives on governance, finance, and information systems. Prior to the interviews, participants provided informed consent, ensuring their voluntary participation and confidentiality. Remote interviews were used to accommodate participants' schedules and locations. This selection process ensured a diverse mix of backgrounds, expertise, and roles, allowing for a comprehensive exploration of financial metrics, information systems, and independent director resignations.

Table 1: Demographic Profile of Respondents.

Participant	Gender	Age	Position	Years in Role	Industry
P1	Male	55	Independent Director	8	Finance
P2	Female	48	CFO	12	Technology
P3	Male	60	CEO	15	Healthcare
P4	Female	42	Information Systems Manager	7	Manufacturing
P5	Male	50	Board Chair	10	Energy
P6	Female	45	Risk Management Officer	5	Finance
P7	Male	58	Independent Director	12	Retail
P8	Female	53	CFO	9	Hospitality

This qualitative study employs semi-structured interviews to explore the interplay between financial indicators, information systems, and independent director resignations. The use of semi-structured interviews provides flexible yet focused qualitative data, as illustrated in Table 2. A structured framework guided the interviews to ensure consistent probing while allowing participants to articulate their experiences and perspectives. Open-ended questions facilitated an in-depth understanding of the complex interactions among financial metrics and information technology within corporate governance. Remote interviews were conducted to accommodate participants' schedules and locations, enhancing accessibility and fostering candid discussions in a comfortable setting. Each 60-minute interview focused on information systems in decision-making, financial indicators, and director resignations. To capture the full complexity of the interactions, interviews were videotaped, allowing for the observation of nonverbal cues, emotions, and context. The interviews were transcribed verbatim, ensuring accurate capture of participant responses. These transcriptions enable the examination of patterns, themes, and insights, providing a robust basis for scholarly analysis.

Table 2: Interview Guideline.

Variable	Interview Questions
Return on Equity	1. Can you share your perspectives on how variations in ROE may influence the dynamics of the board? 2. In your experience, how might high or low ROE impact decision-making processes within the board?
Earnings Management	1. Could you discuss your views on the correlation between earnings management and director resignations? 2. How do you think directors perceive and respond to instances of aggressive earnings management?
Audit Opinions	1. How do different types of audit opinions, such as unqualified or qualified, relate to director resignations? 2. In your role, how have adverse audit opinions influenced governance concerns within the board?
Major Litigation	1. Can you elaborate on how major litigation events impact the likelihood of independent director resignations? 2. Have you observed directors resigning to avoid legal implications or due to disagreements over litigation?
Changes in the Largest Shareholder	1. From your perspective, how do changes in ownership structure influence independent director resignations? 2. Have new major shareholders led to director departures due to different expectations or governance preferences?
Number of Board Meetings	1. How would you analyse the relationship between the frequency of board meetings and the probability of director resignations? 2. In your experience, what role does the frequency of board meetings play in addressing potential communication issues?
Quick Ratio	1. Can you discuss your insights into how variations in the quick ratio might affect the likelihood of director resignations? 2. How does the organization's financial liquidity, as indicated by the quick ratio, influence board dynamics in your opinion?
Asset-Liability Ratio	1. From your perspective, how might the asset-liability ratio impact the probability of independent director resignations? 2. Have you observed situations where a high asset-liability ratio contributed to governance concerns or director decisions?

In qualitative research, data saturation signifies the point at which additional data no longer yields new insights, indicating that a comprehensive understanding has been achieved. In this study, data saturation was evaluated throughout the data collection process. Researchers systematically analysed data after each interview to identify emerging patterns, assessing whether further interviews were necessary. Saturation was reached after eight interviews, as no new themes or insights emerged, and the data began to show repetitive patterns. This point marked the theoretical sufficiency of the data collection, enhancing the study's credibility and reliability. Achieving data saturation is crucial for ensuring the rigor of the study, as it confirms that the research questions have been thoroughly addressed. The diverse sample of participants provided a range of perspectives, contributing to the study's credibility by ensuring an in-depth exploration of participants' views. The saturation of data influences the analysis of themes, reflecting a comprehensive investigation of the relationships among financial indicators, information systems, and independent director resignations.

This study employed qualitative thematic analysis to investigate participants' perspectives on financial indicators, information systems, and independent director resignations (see Table 3). The process began with the transcription of interviews to ensure accurate capture of participants' statements. Researchers then reviewed these transcripts to understand the content and context, identifying recurring themes, terms, and concepts. Data was systematically coded using both inductive and deductive approaches, uncovering significant connections between financial metrics, information systems, and director resignations. Coded data was grouped into themes, which were refined through iterative team discussions to enhance clarity and validity. This iterative process helped reduce redundancy, clarify distinctions, and ensure the credibility and authenticity of the themes in relation to the research objectives.

Table 3: Thematic Analysis.

Stage	Description
Stage 1: Data Familiarization	Objective: Develop a foundational understanding of the data and identify potential themes. Process: Initial review of the interview transcripts by researchers to become familiar with the content. No coding or thematic identification at this point. Activities: Reading and re-reading transcripts, noting initial thoughts, ideas, and impressions without committing to specific themes.
Stage 2: Initial Coding	Objective: Begin the process of organizing and categorizing data into meaningful codes. Process: Systematic coding of relevant segments of the data. Codes are often short, descriptive labels capturing the essence of the content. Activities: Identifying recurring patterns, concepts, and key ideas. Generating initial codes to label these patterns. Grouping related codes to form preliminary themes.
Stage 3: Theme Development	Objective: Refine and finalize identified themes, ensuring coherence and relevance. Process: Reviewing and revising codes to ensure consistency and relevance. Clustering codes into broader themes that capture overarching concepts. Ensuring themes align with the research objectives and participant perspectives. Activities: Constant comparison of codes and themes across the dataset. Seeking feedback from research peers to enhance the validity and reliability of themes. Iterative refinement until a coherent thematic structure emerges.

The rigor of this qualitative study underpins its validity. To ensure a comprehensive analysis, various strategies were employed following a purposive sampling approach. Experts in corporate governance, finance, and information systems were selected to provide diverse perspectives on financial metrics and director resignations. A systematic thematic analysis was conducted, involving detailed reading, coding, and thematic development, with periodic reviews to refine the analysis. Research team discussions facilitated the identification of key themes and built consensus. Data saturation confirmed the adequacy of the sample size, indicating that further interviews were unlikely to yield new insights. These rigorous methodologies enhance the study's qualitative findings and contribute to a deeper understanding of independent director resignations in the context of financial metrics and information systems.

Results

This study explores why independent directors resign from corporate boards by interviewing professionals in finance, governance, and information systems. Topics covered include ROE, earnings management, audit opinions, major litigation, shareholder changes, board meetings, the quick ratio, and the asset-liability ratio. The findings reveal how psychological factors, information systems, and financial metrics influence director decisions. The article will analyse these complexities and relationships, drawing on participant insights and relevant literature to explain director resignations.

ROE Influencing Resignations of Independent Directors

This qualitative study reveals that ROE impacts the resignation of independent directors from corporate boards. Discussions with experts in finance, governance, and information systems identified a consistent pattern (Figure 1). Respondent 1, a financial expert, emphasized the role of ROE in board dynamics and director behaviour, noting that low ROE can lead to governance concerns and prompt directors to reconsider their positions. Respondent 5, a Board Chair in an energy firm, stated, "A prolonged decline in ROE can create an environment of uncertainty, leading to resignations as directors may struggle to fulfil their fiduciary responsibilities." These findings are supported by Nissim (2022), who confirmed that low ROE can signal financial distress and complicate governance. Conversely, Respondent 3, a hospital CEO, observed that while high ROE can enhance board confidence and support strategic decision-making, a rapid increase in ROE may prompt scepticism and potential resignations due to perceived financial aggressiveness. Thus, both low and high ROE can lead directors to reassess their roles, highlighting the complex relationship between ROE and director resignations.

Ullah et al. (2020) noted that while high ROE is generally favourable, unexplained fluctuations can unsettle board members. This finding aligns with qualitative results indicating that changes in ROE, regardless of their direction, can significantly influence independent director resignations. Financial Risk Management Officer Respondent 6 highlighted the role of information systems in shaping perceptions of ROE. According to Respondent 6, real-time financial data provided by information systems supports directors in making informed decisions about ROE and their tenure. This underscores the connection between information systems and financial metrics, illustrating the technological impact on governance. Monteiro et al. (2022)

further linked information systems to financial decision-making, demonstrating that robust information systems aid directors in evaluating financial indicators. These findings corroborate the current study, emphasizing the importance of information systems in managing ROE and independent director resignations.

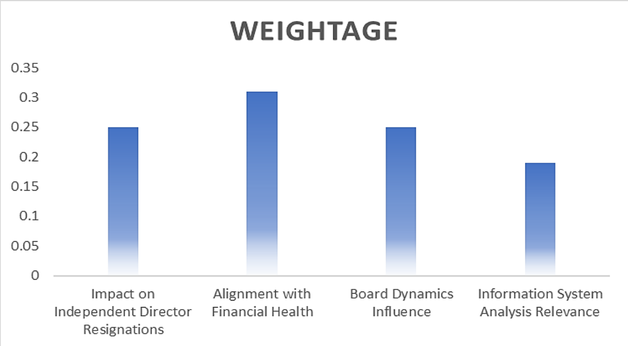

Figure 1: Weightage of Respondents Related to ROE Factors.

Earnings Management Influencing Resignations of Independent Directors

The qualitative findings reveal the impact of Earnings Management on independent director resignations from corporate boards. Respondent 2, an experienced CFO, highlighted that aggressive Earnings Management undermines directors' trust and creates discomfort with financial reporting standards, potentially leading to resignations. This data suggests that aggressive Earnings Management may raise concerns about directors' responsibilities. Jin et al. (2022) corroborate these qualitative insights, showing that questionable financial practices can influence director decisions, with financial specialists being particularly likely to resign if they perceive ethical breaches in financial reporting. Additionally, Respondent 4, a manager with expertise in financial reporting technologies, discussed the implications of earnings management systems in this context.

An effective information system can mitigate earnings management by providing real-time financial data that makes justifying manipulative practices more difficult. This highlights the connection between information systems and financial governance, demonstrating how technology can reduce the risks associated with aggressive earnings management. Yu & Fang (2022) found that advanced information systems are capable of detecting financial irregularities, concluding that improved information systems help prevent earnings management. These findings support the qualitative evidence that robust information systems are essential for managing earnings practices and may influence director resignations.

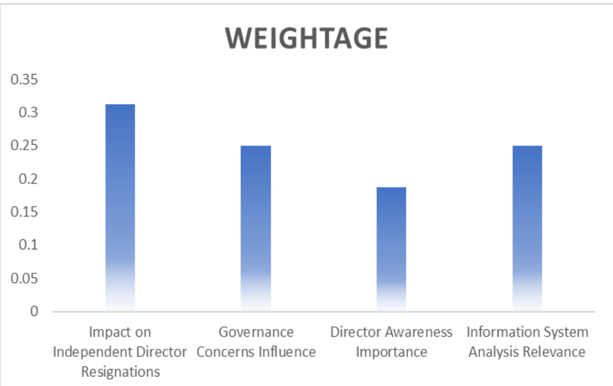

Figure 2: Weightage of Respondents Related to Earnings Management.

Audit Opinions Influencing Resignations of Independent Directors

This qualitative study investigates how audit opinions influence independent director resignations on corporate boards. Interviews with finance, governance, and IT experts reveal a recurring pattern: negative audit outcomes significantly impact directors' decisions. Respondent 3, an experienced hospital CEO, noted that adverse audit results can lead to changes in board governance and prompt director resignations due to financial concerns. These findings align with Kamarudin et al. (2012), who emphasized that unfavourable audit opinions can compel directors, particularly those with financial expertise, to resign (Figure 3). Additionally, the study explored how information systems affect audit opinions. Respondent 6, a Financial Risk Management Officer, highlighted that robust information systems mitigate governance challenges arising from inaccurate audit reports. Real-time financial data enables directors to address audit report errors effectively. Wu et al. (2024) further supported these findings by noting that modern information technologies enhance audit report management and response, confirming the role of information systems in influencing audit opinions and subsequent director resignations.

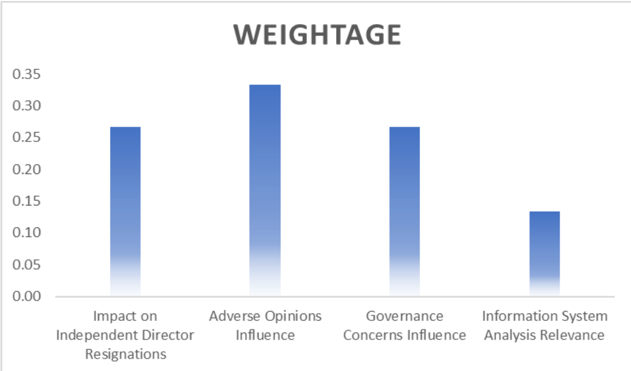

Figure 3: Weightage of Respondents Related to Audit Opinion.

Major Litigation Influencing Resignations of Independent Directors

This qualitative study examines the impact of Major Litigation on independent director resignations within corporate boards. Through in-depth interviews with finance, governance, and IT experts, a discernible pattern emerged regarding the influence of Major Litigation on director departures. Respondent 5, a board chair of an energy firm, highlighted that substantial legal challenges can strain directors, potentially leading to their resignation due to legal pressures and shareholder demands. This aligns with Anokhin et al. (2022), who confirmed through a comprehensive review that major litigation significantly affects board dynamics, often resulting in the resignation of directors, particularly those with legal expertise (Figure 4). The study also found that high-profile litigation frequently follows director resignations. Respondent 2, a seasoned CFO, noted that perceptions of major lawsuits are significantly shaped by information systems. Effective information systems play a crucial role in managing litigation risks and supporting director decision-making by providing real-time data. This underscores the technological advancements in financial governance systems and their relevance to managing major legal issues. Hwang et al. (2020) further support this by demonstrating that modern IT accelerates legal resolutions, thereby impacting high-profile legal cases and director resignations.

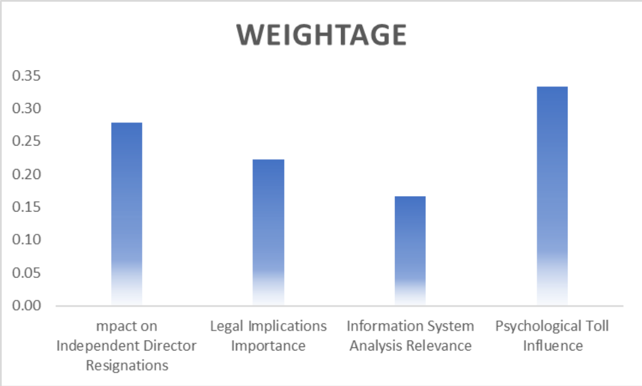

Figure 4: Weightage of Respondents Related to Major Litigation.

Changes in the Largest Shareholder Influencing Resignations of Independent Directors

This qualitative study investigates the impact of changes in the largest shareholder on independent director resignations. Through detailed interviews with experts in finance, governance, and information systems, the study identified a trend illustrating the intricate dynamics between ownership structure changes and director departures. Respondent 1, an experienced independent financial director, highlighted that significant shareholder shifts can alter board dynamics, with new major shareholders often seeking different governance approaches. According to Respondent 1, directors may resign if their governance or strategic alignment diverges from that of the new primary stakeholder. The study's qualitative findings reveal that directors frequently reassess their positions following major shareholder changes. These conclusions are corroborated by Sun (2021), whose comprehensive review of ownership structure and board dynamics supports the notion that major shareholder changes influence director resignations (Figure 5). Respondent 3, a hospital CEO, emphasized the role of information systems in shaping perceptions of shareholder changes. Effective information systems facilitate adjustments for major stakeholders, with real-time data assisting directors in understanding ownership changes and making informed decisions about board continuity. Zhou et al. (2021) further validated these findings by demonstrating that modern information systems enable firms to swiftly evaluate ownership changes, reinforcing the qualitative conclusion that information systems significantly affect largest shareholder dynamics and director resignations.

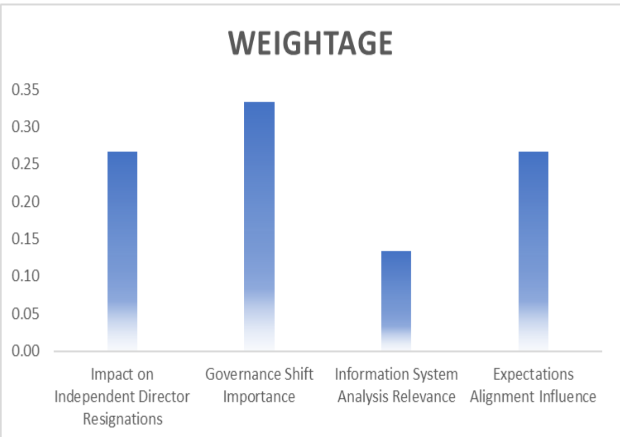

Figure 5: Weightage of Respondents Related to Changes in the Largest Shareholder.

Number of Board Meetings Influencing Resignations of Independent Directors

This qualitative study investigates the impact of board meeting frequency on independent director resignations. In-depth interviews with experts in finance, governance, and IT revealed a connection between board meeting frequency and director exits. Respondent 4, an Information Systems Manager, noted that the frequency of board meetings affects director engagement and communication. Infrequent meetings can lead to director dissatisfaction and resignations. These findings are supported by Khandelwal et al. (2023), who found that infrequent board meetings may influence directors' decisions to resign, particularly among governance experts (Figure 6). Additionally, Respondent 6, a Financial Risk Management Officer, emphasized that information systems improve board communication and help address issues arising from infrequent meetings. Di Vaio et al. (2021) further confirmed that information systems can mitigate the impact of infrequent board meetings by facilitating effective communication and decision-making. This supports the conclusion that information systems play a crucial role in managing board meeting frequency and its effects on director resignations.

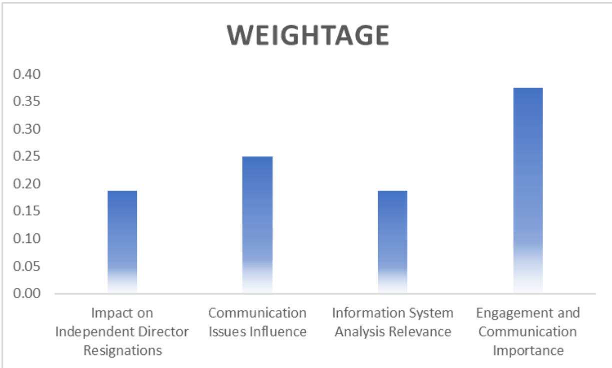

Figure 6: Weightage of Respondents Related to Number of Board Meetings.

Quick Ratio influencing Resignations of Independent Directors

This qualitative study explores the impact of the Quick Ratio on independent director resignations from corporate boards. In-depth interviews with experts in finance, governance, and information systems revealed a nuanced relationship between financial liquidity, as indicated by the Quick Ratio, and director departures. Respondent 3, a senior hospital CEO, emphasized the significance of the Quick Ratio in decision-making, noting that a low ratio can signal financial distress and prompt directors to reconsider their positions to mitigate risks. The study found that the Quick Ratio significantly influences director resignations (Figure 7). Patel et al. (2022) corroborated these findings through a comprehensive analysis of financial liquidity indicators and board dynamics, indicating that directors, particularly those with financial expertise, may resign in response to a low Quick Ratio. Respondent 2, an expert CFO, discussed the role of information systems in shaping perceptions of the Quick Ratio, stating that real-time financial data and effective IT are crucial for assessing liquidity issues and making informed decisions about board continuity. Kim et al. (2022b) further supported this perspective, demonstrating that modern information technologies facilitate quicker resolution of liquidity concerns. This reinforces the study's conclusion that information systems and the Quick Ratio are integral to understanding and managing director resignations.

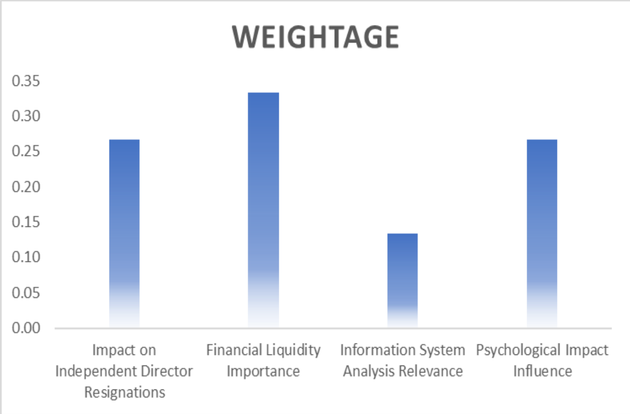

Figure 7: Weightage of Respondents Related to Quick Ratio.

Asset-Liability Ratio Influencing Resignations of Independent Directors

This qualitative study examines how the Asset-Liability Ratio influences independent director resignations. Interviews with finance, governance, and information systems experts revealed that a high Asset-Liability Ratio, indicating significant financial risk, can drive directors to resign to avoid potential liabilities and preserve their professional integrity (Figure 8). Respondent 5, an energy firm board chair, highlighted the crucial role of this ratio in board decisions. Kempeneer (2021) corroborates these findings, noting that a high Asset-Liability Ratio can prompt director exits, particularly among financial professionals. Respondent 4, an information systems manager, emphasized that effective IT and real-time financial data are essential for assessing this ratio and managing board continuity. Berg & Kim (2022) further support this by showing that advanced information systems help address financial risks, reinforcing the study's conclusion that information systems and the Asset-Liability Ratio are key factors in director resignations.

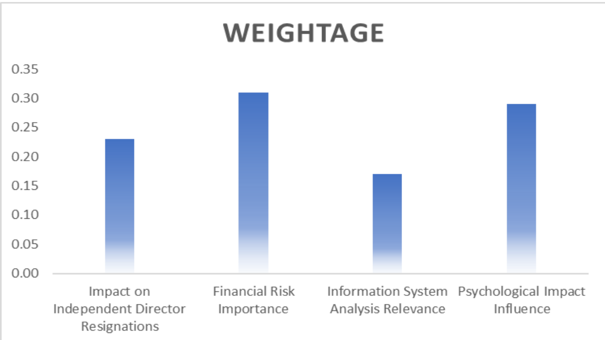

Figure 8: Weightage of Respondents Related to Asset-Liability Ratio

Discussion

The discussion chapter of this study integrates the analysis of factors influencing independent director resignations with insights from the literature review. It explores the complex interplay between financial indicators, information systems, and governance processes affecting director decisions. The research highlights that fluctuations in ROE can influence director resignations, revealing a strong correlation between ROE, financial health, and board dynamics. Financial stability is crucial for effective governance, as directors may resign if financial performance deteriorates. The study also establishes a connection between earnings management and director turnover, emphasizing that aggressive profit manipulation can significantly impact directors' decisions. The findings underscore the importance of robust governance and the need for transparency in financial management to prevent resignations. Additionally, the study supports existing literature on the impact of negative audit opinions on director turnover and governance, aligning with Wen et al. (2020), who assert that audit outcomes affect board dynamics and governance practices. Furthermore, the study confirms that high-profile litigation contributes to director resignations, with the psychological effects of such cases influencing directors' decision-making, as discussed by Imbernon et al. (2022).

Directors may resign to avoid legal issues, protect their health, and reduce the stress associated with litigation. Changes in major shareholders strongly predict board resignations, highlighting the need for new governance strategies to align with stakeholder expectations. The study suggests that directors should reassess their positions in light of potential shifts in governance expectations from new major shareholders. It also underscores the role of information technology in facilitating governance transitions. Thiéry et al. (2023) found that frequent board meetings are linked to better director engagement and communication, with infrequent meetings increasing resignation likelihood due to perceived disengagement. Research shows that financial liquidity indicators like the Quick Ratio influence director resignations, with directors reconsidering their roles if financial concerns diminish the ratio. The Asset-Liability Ratio also impacts board decisions, with high ratios prompting directors to resign to mitigate risks (Watson et al., 2023). Additionally, ROE, Quick Ratio, Asset-Liability Ratio, and Earnings Management are critical factors in director decisions (Chung et al., 2023). Large lawsuits, audit issues, and governance challenges can also lead to resignations. Information technology enhances governance by improving data visibility and communication, potentially affecting director turnover. Based on the above discussion, we propose the following propositions:

1. Director evaluations of the organization's financial health, as indicated by metrics such as ROE, Quick Ratio, and Asset-Liability Ratio, significantly impact decisions regarding board continuity.
2. Governance challenges, including aggressive earnings management, adverse audit opinions, major litigation, and changes in principal shareholders, can lead to director resignations.
3. Information systems play a critical role in influencing director resignations, financial management, and governance.
4. Infrequent board meetings may hinder communication, leading to increased feelings of isolation among directors and potentially influencing their decision to resign.
5. The psychological impact of governance issues, particularly during high-profile litigation and severe financial crises, drives independent directors to resign.
6. Changes in major shareholders significantly affect director resignations, indicating that new major stakeholders may have different governance expectations.

Conclusion

This study utilizes information system analysis to explore the factors leading to independent director resignations.

Key aspects such as ROE, Earnings Management, Audit Opinions, Major Litigation, Largest Shareholder Changes, Board Meetings, Quick Ratio, and Asset-Liability Ratio are examined to understand corporate board dynamics. Advanced governance information systems offer transparent communication, real-time financial data, and risk reduction, helping directors manage these issues effectively. Such systems assist in evaluating ROE, Quick Ratio, and Asset-Liability Ratio, improving financial oversight and governance. They also address challenges related to unfavourable audit opinions, major litigation, and shareholder changes. Enhanced information systems facilitate regular, effective communication, reducing isolation and improving board engagement. Studies indicate that directors may resign if communication barriers prevent participation in board activities. Thus, information systems are crucial for addressing financial and governance issues, ultimately aiding in the prevention of director resignations.

Implications

Practical Implications

Companies must invest in advanced information systems to ensure real-time financial data and transparent communication. Effective information systems are crucial for governance and operations, as they significantly impact directors' decision-making. Leaders should promote ethical use of these systems and provide directors with training on financial judgments facilitated by technology. To prevent governance issues and board resignations, firms need proactive IT management and regular system audits. Collaboration between IT and governance professionals is essential for integrating technology into governance strategies. Additionally, incorporating IT perspectives into board meetings and focusing on technology training for directors will enhance their ability to manage and leverage information systems effectively.

Theoretical Implications

This study advances corporate governance theory by emphasizing the critical role of information system analysis in independent directors' resignation decisions. The theoretical framework integrates financial metrics, governance practices, and information technology, highlighting the dynamic interaction between these elements. It underscores the significance of real-time data and transparent communication in effective governance, revealing how independent directors utilize information systems for decision-making. This research demonstrates how information technology can strategically support directors' perspectives, promote transparent governance, and influence decision-making processes, thereby enriching theoretical discourse on corporate governance. Additionally, it explores the relationship between information systems and directors' psychological decisions, showing that advanced information systems can mitigate the psychological impact of governance challenges. The study suggests a need to reassess governance frameworks to incorporate information technology and address directors' psychological well-being. Overall, the study illustrates that information systems are strategic assets with substantial implications for organizational governance and director decisions.

Limitations and Future Direction

This study has elucidated the complex interplay between information system analysis and independent director resignations, though it also highlights areas for further research. The investigation focused on how information system analysis influences governance and director decisions but did not assess the effectiveness of organizational information systems. Future research could explore the impact of advanced technologies, such as artificial intelligence and blockchain, on governance and director resignations, reflecting the evolving landscape of corporate information systems. The study's reliance on semi-structured interviews provided valuable qualitative insights, but the limited sample size and specific organizational context restrict generalizability. To enhance the external validity of these findings, quantitative methods, such as surveys or archival data analysis, should be employed in future studies. A larger and more diverse sample could offer broader insights into the trends and dynamics of information system analysis and director resignations.

Additionally, the study may have overlooked aspects of board and organizational dynamics by concentrating primarily on financial metrics and governance rules. Information system analysis affects director resignations through board dynamics, internal governance, and organizational composition, which warrants further investigation. Longitudinal studies could track the evolving relationship between information system analysis, governance practices, and director resignations over time to better understand trends and causality. Moreover, the study did not address cybersecurity issues related to information systems, such as data breaches and their impact on director decisions. In the context of increasing cybersecurity concerns, future research should consider how data breaches and cyberattacks affect director decisions and explore how effective cybersecurity risk management can enhance corporate governance in digital firms.

Project Funding

General Project of the Social Science Evaluation Committee of Loudi City "Implementation Research on the Integration and Development of Digital Economy and Real Economy in Loudi City" (No. 202320B)

Hunan Province's first-class course "Tax Law" (Xiang Jiao Tong [2019] No. 291)

References

Abd Aziz, N., Rahim, F. A. M., & Aziz, N. M. (2022). Investigation of the Relationship Between the Communication Barrier, the Experience, and Project Delay Among Project Teams in a Private Residential Project; A PLS-SEM Technique. *International Journal of Construction Supply Chain Management*, *12*(2), 193-208. Retrieved from https://ijcscm.com/menu-script/index.php/ijcscm/article/view/182

Ahmadi, S., Widhiastuti, S., & Helmy, I. (2022). Stimulating Salesperson's Innovative Work Behavior: A Study of Microfinance Institutions in Indonesia. *Transnational Marketing Journal*, *10*(2), 387-401. Retrieved from https://transnationalmarket.com/menu-script/index.php/transnational/article/view/157

Alruwili, A. A., & Elsawy, H.-E. A. (2024). Story-Based Extracurricular Tasks for Improving EFL Learners' Speaking Skills. *Eurasian Journal of Applied Linguistics*, *10*(1), 254-268. Retrieved from https://ejal.info/menuscript/index.php/ejal/article/view/711

Aniello, G., Shamon, H., & Kuckshinrichs, W. (2021). Micro-economic assessment of residential PV and battery systems: The underrated role of financial and fiscal aspects. *Applied energy, 281*, 115667. doi: https://doi.org/10.1016/j.apenergy.2020.115667

Anokhin, S., Morgan, T., Schulze, W., & Wuebker, R. (2022). Is a reputation for misconduct harmful? Evidence from corporate venture capital. *Journal of Business Research, 138*, 65-76. doi: https://doi.org/10.1016/j.jbusres.2021.09.008

Bai, J., Tang, X., & Zheng, Y. (2023). Serving the truth: Do directors with media background improve financial reporting quality? *International Review of Financial Analysis, 85*, 102452. doi: https://doi.org/10.1016/j.irfa.2022.102452

Berg, N., & Kim, J.-Y. (2022). Optimal online-payment security system and the role of liability sharing. *Economic Modelling, 110*, 105805. doi: https://doi.org/10.1016/j.econmod.2022.105805

Borralho, J. M., Hernández-Linares, R., Gallardo-Vázquez, D., & de Sousa Paiva, I. C. (2022). Environmental, social and governance disclosure's impacts on earnings management: Family versus non-family firms. *Journal of Cleaner Production, 379*, 134603. doi: https://doi.org/10.1016/j.jclepro.2022.134603

Boyer, K. K., Gardner, J. W., & Schweikhart, S. (2012). Process quality improvement: An examination of general vs. outcome-specific climate and practices in hospitals. *Journal of operations management, 30*(4), 325-339. doi: https://doi.org/10.1016/j.jom.2011.12.001

Brodin, J., & Renblad, K. (2020). Improvement of preschool children's speech and language skills. *Early Child Development And Care, 190*(14), 2205-2213. doi: https://doi.org/10.1080/03004430.2018.1564917

Chang, Y., Pan, X., Wang, J., & Zhou, Q. (2021). Depoliticization and corporate cash holdings: Evidence from the mandated resignation of directors in China. *Journal of Corporate Finance, 69*, 102004. doi: https://doi.org/10.1016/j.jcorpfin.2021.102004

Chen, S., Huang, F.-W., & Lin, J.-H. (2023). Green technology choices under the cap-and-trade mechanism with insurer green finance in a dragon-king environment. *Energy Economics, 117*, 106490. doi: https://doi.org/10.1016/j.eneco.2022.106490

Chen, T. (2023). Common auditors and internal control similarity: Evidence from China. *The British Accounting Review, 55*(2), 101173. doi: https://doi.org/10.1016/j.bar.2022.101173

Cheng, L., & Sun, Z. (2019). Do politically connected independent directors matter? Evidence from mandatory resignation events in China. *China Economic Review, 58*, 101188. doi: https://doi.org/10.1016/j.chieco.2018.05.011

Cherukunnath, D., & Singh, A. P. (2022). Exploring cognitive processes of knowledge acquisition to upgrade academic practices. *Frontiers in Psychology, 13*, 682628. doi: https://doi.org/10.3389/fpsyg.2022.682628

Cheung, H. (2023). Non-monetary double-entry carbon accounting method for entities in emission trading systems. *Journal of Cleaner Production, 422*, 138475. doi: https://doi.org/10.1016/j.jclepro.2023.138475

Chintrakarn, P., Jiraporn, P., Treepongkaruna, S., & Lee, S. M. (2022). The effect of board independence on dividend payouts: A quasi-natural experiment. *The North American Journal of Economics and Finance, 63*, 101836. doi: https://doi.org/10.1016/j.najef.2022.101836

Chung, K. H. Y., Li, D., & Adriaens, P. (2023). Technology-enabled financing of sustainable infrastructure: A case for blockchains and decentralized oracle networks. *Technological Forecasting and Social Change, 187*, 122258. doi: https://doi.org/10.1016/j.techfore.2022.122258

Chy, M., De Franco, G., & Su, B. (2021). The effect of auditor litigation risk on clients' access to bank debt: Evidence from a quasi-experiment. *Journal of Accounting and Economics, 71*(1), 101354. doi: https://doi.org/10.1016/j.jacceco.2020.101354

Contreras-Cruz, A., Kirbac, A., Dennett, C., & Daim, T. U. (2023). Human-centered design as a tool to improve employee experience: The case of a US plant-based food manufacturer. *Technology in society, 73*, 102248. doi: https://doi.org/10.1016/j.techsoc.2023.102248

DasGupta, R. (2022). Financial performance shortfall, ESG controversies, and ESG performance: Evidence from firms around the world. *Finance Research Letters, 46*, 102487. doi: https://doi.org/10.1016/j.frl.2021.102487

Di Vaio, A., Hasan, S., Palladino, R., Profita, F., & Mejri, I. (2021). Understanding knowledge hiding in business organizations: A bibliometric analysis of research trends, 1988–2020. *Journal of Business Research, 134*, 560-573. doi: https://doi.org/10.1016/j.jbusres.2021.05.040

Dordi, T., Weber, O., Rhodes, E., & McPherson, M. (2023). A voice for change? Capital markets as a key leverage point in Canada's fossil fuel industry. *Energy Research & Social Science, 103*, 103189. doi: https://doi.org/10.1016/j.erss.2023.103189

Du, J., Shi, Y., Li, W., & Chen, Y. (2023). Can blockchain technology be effectively integrated into the real economy? Evidence from corporate investment efficiency. *China Journal of Accounting Research, 16*(2), 100292. doi: https://doi.org/10.1016/j.cjar.2023.100292

Elkins, H., Entwistle, G., & Schmidt, R. N. (2021). The influence of opportunistic capital structure disclosure in international financial reporting on nonprofessional investors. *Journal of International Accounting, Auditing and Taxation, 42*, 100378. doi: https://doi.org/10.1016/j.intaccaudtax.2021.100378

Fan, R., Pan, J., Yu, M., & Gao, H. (2022). Corporate governance of controlling shareholders and labor employment decisions: Evidence from a parent board reform in China. *Economic Modelling, 108*, 105753. doi: https://doi.org/10.1016/j.econmod.2021.105753

Gale, M., Bongiovanni, I., & Slapnicar, S. (2022). Governing cybersecurity from the boardroom: challenges, drivers, and ways ahead. *Computers & Security, 121*, 102840. doi: https://doi.org/10.1016/j.cose.2022.102840

Gao, Y., & Huang, X. (2021). Forecast of compensation amount based on big data network and machine learning algorithm in intellectual property law. *Microprocess. Microsystems, 80*, 103623. doi: https://doi.org/10.1016/j.micpro.2020.103623

Goodell, J. W., Li, M., & Liu, D. (2023). Causes and consequences of flocked resignations of independent directors: Inferences from firm impacts following Kangmei Pharmaceutical's scandal. *Finance Research Letters, 51*, 103496. doi: https://doi.org/10.1016/j.frl.2022.103499

Goud, N. N. (2022). Corporate governance: Does it matter management of carbon emission performance? An empirical analyses of Indian companies. *Journal of Cleaner Production, 379*, 134485. doi: https://doi.org/10.1016/j.jclepro.2022.134485

Graham, J. R., Grennan, J., Harvey, C. R., & Rajgopal, S. (2022). Corporate culture: Evidence from the field. *Journal of Financial Economics, 146*(2), 552-593. doi: https://doi.org/10.1016/j.jfineco.2022.07.008

Han, Y., Zhen, X., Moan, T., & Huang, Y. (2021). Real time prediction of operational safety limits for dynamic positioning of an FPSO in a Deepwater Artificial Seabed system. *Marine Structures, 80*, 103093. doi: https://doi.org/10.1016/j.marstruc.2021.103093

He, F., Ding, C., Yue, W., & Liu, G. (2023). ESG performance and corporate risk-taking: Evidence from China. *International Review of Financial Analysis, 87*, 102550. doi: https://doi.org/10.1016/j.irfa.2023.102550

Heaney, E., Hunter, L., Clulow, A., Bowles, D., & Vardoulakis, S. (2021). Efficacy of communication techniques and health outcomes of bushfire smoke exposure: a scoping review. *International Journal of Environmental Research and Public Health, 18*(20), 10889. doi: https://doi.org/10.3390/ijerph182010889

Ho, L.-T., & Chang, K.-C. (2022). Promoting relational collaborative partnership to implement coastal settlement revitalization. *Marine Policy, 146*, 105242. doi: https://doi.org/10.1016/j.marpol.2022.105242

Hu, R., Karim, K., Lin, K. J., & Tan, J. (2020). Do investors want politically connected independent directors? Evidence from their forced resignations in China. *Journal of Corporate Finance, 61*, 101421. doi: https://doi.org/10.1016/j.jcorpfin.2018.11.004

Hwang, T.-Y., Jung, G., Lee, C.-J., & Kim, H.-Y. (2020). Analysis of involuntary admissions in Korea through the admission management information system. *International Journal of Law and Psychiatry, 68*, 101542. doi: https://doi.org/10.1016/j.ijlp.2020.101542

Imbernon, U., del Mar Casanovas-Rubio, M., Monteiro, C., & Armengou, J. (2022). A decision-making method for planning exhibitions in arts organizations: A case study of CaixaForum Barcelona. *Evaluation and program planning, 93*, 102102. doi: https://doi.org/10.1016/j.evalprogplan.2022.102102

Jin, H.-m., Su, Z.-q., Wang, L., & Xiao, Z. (2022). Do academic independent directors matter? Evidence from stock price crash risk. *Journal of Business Research, 144*, 1129-1148. doi: https://doi.org/10.1016/j.jbusres.2022.02.054

Kamarudin, K. A., Ismail, W. A. W., & Samsuddin, M. E. (2012). The influence of CEO duality on the relationship between audit committee independence and earnings quality. *Procedia-Social and Behavioral Sciences, 65*, 919-924. doi: https://doi.org/10.1016/j.sbspro.2012.11.220

Kempeneer, S. (2021). A big data state of mind: Epistemological challenges to accountability and transparency in data-driven regulation. *Government Information Quarterly, 38*(3), 101578. doi: https://doi.org/10.1016/j.giq.2021.101578

Khandelwal, C., Kumar, S., Tripathi, V., & Madhavan, V. (2023). Joint impact of corporate governance and risk disclosures on firm value: Evidence from emerging markets. *Research in International Business and Finance, 66*, 102022. doi: https://doi.org/10.1016/j.ribaf.2023.102022

Kim, B., & Lee, S. (2022a). The impact of celebrity CEOs on restaurant firm performance: The moderating role of environmental dynamism. *Journal of Business Research, 139*, 869-880. doi: https://doi.org/10.1016/j.jbusres.2021.10.031

Kim, J., McCullough, J. S., & Lee, J. (2022b). Do liquidity constraints affect the investment decisions of California hospitals? *Economic Modelling, 113*, 105897. doi: https://doi.org/10.1016/j.econmod.2022.105897

Lee, C.-C. (2023). Analyses of the operating performance of information service companies based on indicators of financial statements. *Asia Pacific Management Review, 28*(4), 410-419. doi: https://doi.org/10.1016/j.apmrv.2023.01.002

Lee, S. (2022). AI as an explanation agent and user-centered explanation interfaces for trust in AI-based systems. In *Human-Centered Artificial Intelligence* (pp. 91-102). Elsevier. doi: https://doi.org/10.1016/B978-0-323-85648-5.00014-1

Li, B., & Liu, X. (2023). Communist party organization and abnormal compensation of enterprise executives. *Finance Research Letters, 57*, 104214. doi: https://doi.org/10.1016/j.frl.2023.104214

Li, J., Liu, X., Xu, L., & Jin, Z. (2020). Current status of demoralization and its relationship with medical coping style, self-efficacy and perceived social support in Chinese breast cancer patients. *The European Journal of Psychiatry, 34*(4), 211-218. doi: https://doi.org/10.1016/j.ejpsy.2020.06.007

Liang, S., Fu, R., & Yang, X. (2022). Concurrent independent directors in the same industry and accounting information comparability. *China Journal of Accounting Research, 15*(4), 100268. doi: https://doi.org/10.1016/j.cjar.2022.100268

Lu, D., Liu, G., & Liu, Y. (2022). Who are better monitors? Comparing styles of supervisory and independent directors. *International Review of Financial Analysis, 83*, 102305. doi: https://doi.org/10.1016/j.irfa.2022.102305

Luo, J.-h., & Liu, Y. (2023). Does the reputation mechanism apply to independent directors in emerging markets? Evidence from China. *China Journal of Accounting Research, 16*(1), 100283. doi: https://doi.org/10.1016/j.cjar.2022.100283

Mariño, R. L., & Montalvo, F. T. (2024). Bibliometric Study and Network Mapping of Teacher Technostress Between 1992-2022. *Comunicar: Revista Científica de Comunicación y Educación*, (78), 1-15. doi: https://doi.org/10.58262/V32I78.1

Monteiro, A. P., Vale, J., Leite, E., Lis, M., & Kurowska-Pysz, J. (2022). The impact of information systems and non-financial information on company success. *International Journal of Accounting Information Systems, 45*, 100557. doi: https://doi.org/10.1016/j.accinf.2022.100557

Muthuswamy, V. V. (2024). Music Teacher Mental Health and Job Performance: Role of Voice Fatigue and Vocal Performance. *Educational Sciences: Theory & Practice, 24*(1), 1-14. Retrieved from https://jestp.com/menuscript/index.php/estp/article/view/1806

Najam, H., Abbas, J., Álvarez-Otero, S., Dogan, E., & Sial, M. S. (2022). Towards green recovery: Can banks achieve financial sustainability through income diversification in ASEAN countries? *Economic Analysis and Policy, 76*, 522-533. doi: https://doi.

org/10.1016/j.eap.2022.09.004

Newton, M., McLardie-Hore, M. F., Holmlund, S., Forster, D., Crawford, S., McCalman, M. P., et al. (2023). Stronger Connections: exploring the views of midwives working with First Nations families in an all-risk, culturally responsive caseload model. *Women and Birth, 36*, S10-S11. doi: https://doi.org/10.1016/j.wombi.2023.07.027

Nissim, D. (2022). Big data, accounting information, and valuation. *The Journal of Finance and Data Science, 8*, 69-85. doi: https://doi.org/10.1016/j.jfds.2022.04.003

Pang, J., Zhang, X., & Zhou, X. (2020). From classroom to boardroom: The value of academic independent directors in China. *Pacific-Basin Finance Journal, 62*, 101319. doi: https://doi.org/10.1016/j.pacfin.2020.101319

Parikh, A., Kumari, D., Johann, M., & Mladenović, D. (2023). The impact of environmental, social and governance score on shareholder wealth: A new dimension in investment philosophy. *Cleaner and Responsible Consumption, 8*, 100101. doi: https://doi.org/10.1016/j.clrc.2023.100101

Patel, A., Sorokina, N., & Thornton Jr, J. H. (2022). Liquidity and bank capital structure. *Journal of Financial Stability, 62*, 101038. doi: https://doi.org/10.1016/j.jfs.2022.101038

Ponce-de-León, L., Gértrudix-Barrio, F., & Sánchez-Parra, M. J. (2022). Social emotional learning and values education in the Musical Language classroom: Aprendizaje socioemocional y educación en valores en el aula de Lenguaje Musical. *Electronic Journal of Music in Education*, (50), 46-66. doi: https://doi.org/10.7203/LEEME.50.25344

Radonjić, A., Duarte, H., & Pereira, N. (2022). Artificial intelligence and HRM: HR managers' perspective on decisiveness and challenges. *European Management Journal, 42*(1), 57-66. doi: https://doi.org/10.1016/j.emj.2022.07.001

Rehan, R., Hadi, A. R. A., Hussain, H. I., & Hye, Q. M. A. (2023). Capital structure determinants across sectors: Comparison of observed evidences from the use of time series and panel data estimators. *Heliyon, 9*(9), e19618. doi: https://doi.org/10.1016/j.heliyon.2023.e19618

Saheruddin, H., & Soedarmono, W. (2022). Do board size, institutional ownership and external auditors matter to market discipline in Indonesian banking? *The Quarterly Review of Economics and Finance, 86*, 389-395. doi: https://doi.org/10.1016/j.qref.2022.08.010

Sinyard, R. D., Veeramani, A., Rouanet, E., Anteby, R., Petrusa, E., Phitayakorn, R., et al. (2022). Gaps in practice management skills after training: a qualitative needs assessment of early career surgeons. *Journal of Surgical Education, 79*(6), e151-e160. doi: https://doi.org/10.1016/j.jsurg.2022.06.009

Siueia, T. T., Wang, J., & Deladem, T. G. (2019). Corporate Social Responsibility and financial performance: A comparative study in the Sub-Saharan Africa banking sector. *Journal of Cleaner Production, 226*, 658-668. doi: https://doi.org/10.1016/j.jclepro.2019.04.027

Shuya, X., & Zainal, S. R. B. M. (2022). How to Achieve Better Sustainable Performance: The Role of Ethical Leadership and Green Employee Empowerment? *AgBioForum, 24*(2), 206-214. Retrieved from https://agbioforum.org/menuscript/index.php/agb/article/view/153

Skuban-Eiseler, T., Orzechowski, M., Denkinger, M., Kocar, T. D., Leinert, C., & Steger, F. (2023). Artificial Intelligence-Based Clinical Decision Support Systems in Geriatrics: An Ethical Analysis. *Journal of the American Medical Directors Association, 24*(9), 1271-1276. e1274. doi: https://doi.org/10.1016/j.jamda.2023.06.008

Song, L., Tian, G. G., & Liao, G. (2021). External regulation, independent director attendance, and governance effects. *China Journal of Accounting Research, 14*(2), 101-128. doi: https://doi.org/10.1016/j.cjar.2021.02.002

Sun, W. (2021). Construction of information platform for shareholder agency governance under group control based on artificial intelligence. *Microprocessors and Microsystems*, 104047. doi: https://doi.org/10.1016/j.micpro.2021.104047

Tan, H., & Wang, Z. (2023). The impact of confucian culture on the cost of equity capital: The moderating role of marketization process. *International Review of Economics & Finance, 86*, 112-126. doi: https://doi.org/10.1016/j.iref.2023.03.010

Tan, Y.-s. (2023). Internal control and bank liquidity creation: Evidence from China. *Research in International Business and Finance, 66*, 102030. doi: https://doi.org/10.1016/j.ribaf.2023.102030

Tao, X., Wong, P. K.-Y., Xu, Y., Liu, Y., Gong, X., Zheng, C., et al. (2023). Smart contract swarm and multi-branch structure for secure and efficient BIM versioning in blockchain-aided common data environment. *Computers in Industry, 149*, 103922. doi: https://doi.org/10.1016/j.compind.2023.103922

Thiéry, S., Lhuillery, S., & Tellechea, M. (2023). How can governance, human capital, and communication practices enhance internal audit quality? *Journal of International Accounting, Auditing and Taxation, 52*, 100566. doi: https://doi.org/10.1016/j.intaccaudtax.2023.100566

Ullah, A., Pinglu, C., Ullah, S., Zaman, M., & Hashmi, S. H. (2020). The nexus between capital structure, firm-specific factors, macroeconomic factors and financial performance in the textile sector of Pakistan. *Heliyon, 6*(8), e04741. doi: https://doi.org/10.1016/j.heliyon.2020.e04741

Watson, S. M., McLean, D. L., Balcom, B. J., Birchenough, S. N., Brand, A. M., Camprasse, E. C., et al. (2023). Offshore decommissioning horizon scan: Research priorities to support decision-making activities for oil and gas infrastructure. *Science of the Total Environment, 878*, 163015. doi: https://doi.org/10.1016/j.scitotenv.2023.163015

Wen, W., Cui, H., & Ke, Y. (2020). Directors with foreign experience and corporate tax avoidance. *Journal of Corporate Finance, 62*, 101624. doi: https://doi.org/10.1016/j.jcorpfin.2020.101624

Wijayanti, R., & Setiawan, D. (2023). The role of the board of directors and the sharia supervisory board on sustainability reports. *Journal of Open Innovation: Technology, Market, and Complexity, 9*(3), 100083. doi: https://doi.org/10.1016/j.joitmc.2023.100083

Worrachananun, M. (2022). The Role of Music in Advertising Strategy on Tourist Attitude and Intention to Visit the Destination. *Przestrzeń Społeczna (Social Space), 22*(3), 438-456. Retrieved from https://socialspacejournal.eu/menu-script/index.php/ssj/article/view/152

Wu, T.-H., Huang, S. Y., Chiu, A.-A., & Yen, D. C. (2024). IT governance and IT controls: Analysis from an internal auditing perspective. *International Journal of Accounting Information Systems, 52*, 100663. doi:

https://doi.org/10.1016/j.accinf.2023.100663

Wu, Y., & Dong, B. (2021). The value of independent directors: Evidence from China. *Emerging Markets Review, 49*, 100763. doi: https://doi.org/10.1016/j.ememar.2020.100763

Xing, J., Zhang, Y., & Xiong, X. (2023). Social capital, independent director connectedness, and stock price crash risk. *International Review of Economics & Finance, 83*, 786-804. doi: https://doi.org/10.1016/j.iref.2022.10.020

Yu, X., & Fang, J. (2022). Tax credit rating and corporate innovation decisions. *China Journal of Accounting Research, 15*(1), 100222. doi: https://doi.org/10.1016/j.cjar.2022.100222

Zadeh, F. N., Askarany, D., Shirzad, A., & Faghani, M. (2023). Audit committee features and earnings management. *Heliyon, 9*(10), e20825. doi: https://doi.org/10.1016/j.heliyon.2023.e20825

Zhao, L., Li, N., & Wu, Y. (2023). Institutional investors' site visits, information asymmetry, and investment efficiency. *International Review of Financial Analysis, 88*, 102674. doi: https://doi.org/10.1016/j.irfa.2023.102674

Zhou, J., Li, W., Yan, Z., & Lyu, H. (2021). Controlling shareholder share pledging and stock price crash risk: Evidence from China. *International Review of Financial Analysis, 77*, 101839. doi: https://doi.org/10.1016/j.irfa.2021.101839