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Decoding Governance Effectiveness: How Board Expertise and Internal Audit Quality Shape Financial Reporting

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ABSTRACT

This study examines the interplay between board expertise, internal control (ICL), internal audit quality (IAQ), and financial reporting quality (FRQ) within financial institutions in Pakistan. The sample of the study was composed of 392 audit professionals from the Southern Punjab region, in the financial services sector; PLS-SEM was employed as statistical tool. The results of the study indicate that board expertise improves the effectiveness and efficiency of an organization's ICL to improve IAQ, and subsequently, improves the reporting quality of the organization; IAQ significantly improves FRQ, therefore confirming the important role of IAQ as an assurance provider to the financial reporting process. The study, therefore, suggests that IAQ has a significant mediation effect on the relationship between ICL and FRQ; IAQ improves the quality of reporting through both an indirect and direct mechanism associated with the organization's ICL. Overall, the results suggest that there is a need for organizations to develop integrated governance mechanisms to create an enhanced level of transparency, reliability and confidence in the reporting of an organization by its stakeholders.

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1. Introduction

Corporate governance acts as one of the significant mechanisms for the promotion of accountability, reduction of agency problems, protection of stakeholders' rights, and the provision of guidance towards stakeholders of financial institutions (Ellili, 2026). There are several corporate governance reforms introduced in Pakistan (Madwe, 2026; Steven, 2025), some of which are advances in the delivery cycle of the code of corporate governance, refinement of the fit-and-proper tests of the directors, and improved stricter prudential oversight which aim at the overall enhancement of governance of the boards and the governing of risks in relation to the effectiveness of the boards. In the context of this study, governance effectiveness refers to the ability of an organization's governance mechanisms to promote accountability, transparency, regulatory compliance, and sound decision-making while safeguarding stakeholder interests. There are still considerable gaps in relation to the effectiveness of financial institutions in Pakistan irrespective of the fact that the reforms are in progress. It has been documented that the majority of the listed banks exhibit a certain degree of mechanical compliance with the corporate governance requisites, however, compliance of the governance standards with respect to the

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boards that relates to the independence, professional qualification and the level of oversight that is considered to be critical, is at its best very minimal. The thin line that exists in relation to the legal compliance of corporate governance and the actual governance of the organisation has led a number of researchers to endorse the particular attributes of boards that are perceived to have a direct impact on the governance processes. In this context, board expertise have been recognised as fundamental elements of corporate governance that to a very great extent enhance the quality of oversight and reliability of financial reports (Noreen et al., 2026).

An additional consideration is that board expertise is crucial for financial institutions (Shafee et al., 2026) because of the technical and risk-intensive nature of the banking and operational processes, regulatory management of risk-based capital, and the valuation of financial instruments. Financial institutions face a changing landscape of regulations (Daud, Norwani, & Yusof, 2018; Disha & Laizu, 2024; Japhta et al., 2016; Jimbo Santana, Lanzarini, & Bariviera, 2020) that include the Basel III capital requirements, the IFRS based financial reporting, and the regulations for risk reporting in a more detailed and refined manner. The SBP notes that the capital adequacy ratio for the banking sector is above the minimum regulatory requirement, as it has been noted for the last five years to remain in the range of approximately 17% - 19%. This illustrates that the sector is adequately capitalised; however, it does not signify that governance is effective. It is assumed that such boards that have a greater level of financial, accounting and industry related expertise will be in a better place to analyse and interpret the complicated financial statements and the managerial assumptions that are made, and be in a position to require internal assurance to be more resilient (Noreen et al., 2026). Nevertheless, previous research in Pakistan has indicated that a large number of the boards are deficient in financial and risk management expertise, and this has the effect of decreasing the level of internal audit work, and the internal control (ICL) which could be a contributing factor to a decline in the level of FRQ.

Though there is now extensive research on corporate governance in Pakistan and other developing countries (Basheer, 2014; Miras-Rodríguez, Martínez-Martínez, & Escobar-Pérez, 2019; Subhash, 2009; Waqar, Rashid, & Jadoon, 2014), there are some areas that are still not investigated. Most existing research focuses on the characteristics of the boards, internal control, quality of internal audit, or financial reporting quality, and few have investigated the interaction of these in a single framework. Furthermore, the current literature has largely dealt with direct relationships, leaving little understanding of the role internal audit quality plays as a link between effective ICL and FRQ. At the institutional level, however, the interdependencies between these are largely unexplored in Pakistan, where regulatory reforms are still ongoing and are working to enhance governance. The current study fills these gaps by designing and experimenting with an integrated corporate governance model that connects the BE, ICL, IAQ and FRQ in the context of emerging economies with specific focus on Pakistan. The objective of this study is to examine the relationship between board expertise, ICL, IAQ and FRQ. This research study holds a lot of importance for operational managers, internal auditors, regulators, and policymakers in the arena of finance. It studies how the various attributes of a board are correlated to the ICL of a company, the audit standards applicable, and the overall quality of financial reporting, and how managers can design various governance improvements in the oversight and decision-making process. For example, if board members have a high level of control, and if board members are sufficiently knowledgeable and are able to exercise control, this will allow for a better-quality control framework which is also more auditable and will, in the end, have better and more useful financial reports.

2. Literature Review

2.1. Theoretical Foundation

According to Agency Theory, good governance mechanisms are needed to address the problem of information asymmetry and opportunistic behavior (Forster et al., 2025; Jensen & Meckling, 1976). Knowledgeable and experienced directors on the Board will enhance the Board's capacity to effectively oversee the organization while also helping the Board design and enforce adequate ICL systems that minimize the agency conflict. Additionally, effective ICL help create an

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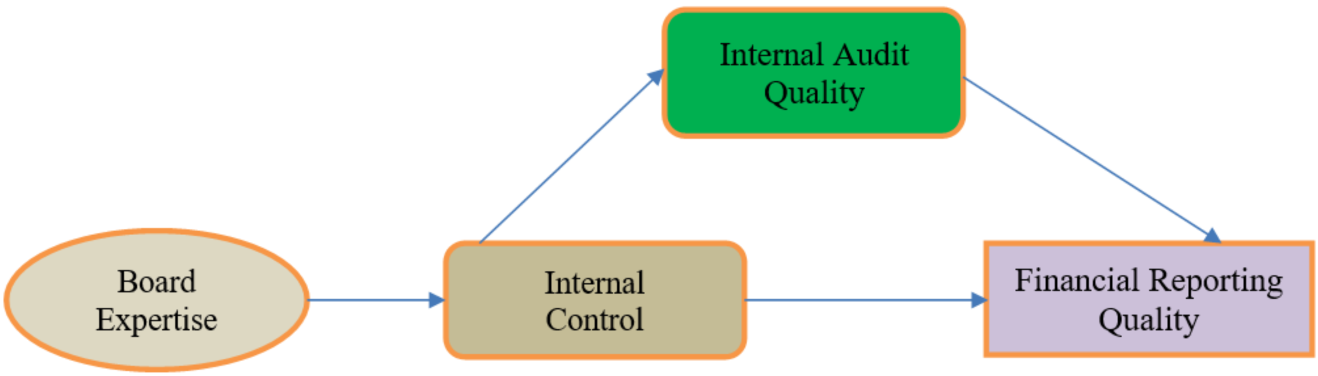
organized environment that contributes to effective internal audit (i.e., all aspects of the organization will be able to rely on an appropriate process, documentation, and risk assessment will support the execution of high-quality internal audits). From a Stakeholder Theory perspective, organizations have an obligation to provide a wide range of stakeholders with transparency and high-quality and credible financial information (Brower & Mahajan, 2013; Raki & Shakur, 2018; Secundo et al., 2023; Van Puyvelde et al., 2012). High-quality internal auditing enhances monitoring and assurance functions that lead to improved FRQ. Additionally, effective ICL systems lead to improved FRQ by reducing the likelihood of errors, fraud, and misstatements. Ultimately, high-quality internal auditing is a key ICL mechanism through which effective ICL can lead to improved financial reporting because high-quality internal auditing provides assurance that effective ICL are designed and operating as intended, enhancing stakeholders' confidence in the financial statements presented to them. Figure 1 highlighted the framework of the study.

Figure 1: Framework of the study



The combination of Agency Theory (Jensen & Meckling, 1976, 1979) and Stakeholder Theory (Secundo et al., 2023; Van Puyvelde et al., 2012) offers a more thorough theoretical rationale for the research model proposed. The internal governance mechanisms that address information asymmetry, limit managerial opportunism, and enhance organizational monitoring using BE, ICL, and IAQ are the major aspects of Agency Theory that are used to explain how they relate to the governance functions of the board. Agency Theory, however, is not fully able to explain how better governance mechanisms can finally improve the credibility of the financial reporting to a wider range of stakeholders. Stakeholder Theory, which focuses on the responsibility of organisations to society, regulators, investors, creditors, employees and shareholders, as all of them are dependent on fair and reliable financial reporting, is complementary to this view. As such, Agency Theory provides insights into governance processes that enhance organizational control, and Stakeholder Theory provides insights into the broader accountability outcomes that are captured in financial reporting quality. Therefore, the combination of the two theories offers a more robust theoretical basis for explaining the effects of these two types of governance mechanisms on the quality of financial reporting in financial institutions.

2.2. Governance Challenges within Pakistan’s Financial Sector

Pakistan's financial sector plays a vital role in supporting economic development by facilitating financial intermediation, promoting investment, and maintaining market stability (Aziz, Waqar, & Shahbaz; Shaheen, Hussain, & Mujtaba, 2018; Ullah et al., 2024). Owing to its systemic importance, the sector operates under an extensive regulatory framework administered by the State Bank of Pakistan (SBP) and the Securities and Exchange Commission of Pakistan (SECP). Over the past decade, regulators have introduced several corporate governance reforms to strengthen board oversight, improve ICL systems, enhance audit practices, and increase the transparency of financial reporting. Despite these regulatory improvements, financial institutions continue to face governance challenges that may adversely affect organizational accountability and reporting quality. One of the key challenges is the variation in BE across financial institutions (Minton, Taillard, & Williamson, 2014). Although regulatory requirements emphasize the appointment of qualified directors, differences in financial knowledge, industry experience, governance competence, and regulatory understanding may limit boards' ability to effectively oversee risk management and internal control processes. Similarly, the implementation of ICL systems varies among institutions because of differences in organizational resources, governance culture, and management commitment. These differences may reduce the effectiveness of monitoring mechanisms and increase the likelihood of reporting deficiencies. In addition, financial institutions operate in an environment characterized by evolving regulatory requirements (Al Suwaidi, Sidek, & Al-Shami, 2022), digital transformation, cybersecurity risks, and increasingly complex financial transactions. These developments require internal audit functions to possess high levels of independence, professional competence, and technical capability to evaluate governance and control systems effectively. Consequently, high IAQ has become essential for strengthening organizational oversight and improving FRQ. Against this background, examining the interrelationships among BE, ICL, IAQ, and FRQ provides valuable empirical evidence on how integrated governance mechanisms can enhance governance effectiveness and reporting reliability within Pakistan's financial sector

2.3. Board Expertise and Internal Control

BE is defined operationally in this study as the knowledge, qualifications and experience of the board members within areas of relevance to their role with the organization and financial decisions (Noreen et al., 2026). It includes, specifically, accounting, finance, auditing, corporate governance, industry specific and regulatory compliance. These skills allow directors to evaluate financial information critically, monitor risk management procedures, evaluate the effectiveness of internal control systems and assure compliance with applicable regulatory requirements. In turn, the board's experience goes beyond that of general management experience, and encompasses the unique skills and capabilities needed to engage in effective governance duties within financial institutions. From the perspective of agency theory, the board’s expertise serves an important role in the protection of stakeholders by decreasing agency-related conflict that occurs in situations when ownership and control in a company are bifurcated (Dong et al., 2021; Forster et al., 2025; Van Puyvelde et al., 2012). Directors who are experienced and possess high levels of financial literacy are in a better position to examine the actions taken by managers, understand the intricacies of finance and rebut advantageous conduct. This improves transparency from managers to stakeholders. According to agency theory, a board of directors that is competent is in a better position to decrease agency-related costs by increasing the level of supervision and enhancing the confidence associated with the financial statements.

Board expertise is the combination of the financial knowledge, professional credentials, and relevant industry experience of board members that allows them to meaningfully engage with management and the operations of the organisation (Noreen et al., 2026). ICL is the set of policies, procedures, and systems that management puts in place to ensure that financial reports are accurate, to protect the organisation's resources, and to ensure that the organisation complies with the law. In the context of financial institutions, and particularly in the case of emerging economies, such as Pakistan, the importance of board competence for the effective functioning of the ICL system is more pronounced as the banking sector is one of the most structured and risky sectors. Prior literature on corporate governance has highlighted that effective and knowledgeable boards are critical to the development of governance structures and control systems (Hilb, 2020; Koskinen, Lu, & Nguyen, 2024; Zubairi & Farooq, 2011).

Hypothesis 1: Board expertise has a significant effect on ICL.

2.4. Mediating role of Internal Audit Quality between Internal Control and Financial Reporting Quality

ICL refers to the system of policies as well as procedures developed by an organisation to protect its assets, provide reliable financial reporting, improve efficiencies, and ensure agreement with applicable laws and regulations (Afsar et al., 2020; Aljumah et al., 2026; Fakhimuddin, 2018). The components of ICL include activities such as risk evaluation, control activities, monitoring and information communication. In contrast, IAQ denotes effectiveness, independence, objectivity, and the reliability of the internal audit function in evaluating and improving the governance and risk management and control processes (Al-Qadasi, Ghaleb, & Qaderi, 2025; Bello, Ahmad, & Yusof, 2018). ICL is an overall concept of the policy and procedures that management puts in place to allow the organization to produce accurate and compliant financial information, safeguard its assets, and improve the overall efficiency of operations and meet corporate governance requirements (Hickman & Petrin, 2021; Hilb, 2020; Miras-Rodríguez, Martínez-Martínez, & Escobar-Pérez, 2019). FRQ means that the financial statements accurately, reliably, transparently, and relevantly represent the financial results and position of an entity. The financial services industry in Pakistan, and particularly financial institutions, has credit, operational and regulatory risks which can cause weak (and/or ineffective) ICL structures and increase the risk of financial misstatements due to fraud and reputational loss.

IAQ is the efficiency of the internal audit function in assessing, implementing, and enhancing ICL at the level of effectiveness, independence, competence, and dependability (Kaawaase et al., 2021; Kabuye et al., 2019). Effective internal auditing is performed by qualified, equitable, and accountable evaluations and auditing processes (and supporting documentation) using consistent auditing plans. In addition, FRQ is the clarity, accuracy, transparency, and timeliness of financial reporting; and all of the financial statements provide an accurate snapshot of the financial standing of an entity in real-time. In view of the many and complex operational and regulatory risks in the financial services sector in Pakistan, IAQ is necessary to preserving the integrity of financial reporting in Pakistan. ICL is a mechanism that develops a system of policies, procedures, and technologies to ensure the efficiency of organisation structures, modes of operation, and compliance with laws by protecting the entity from the risk of loss through its operations and enhancing the efficiency of reporting. The quality of internal audit is how effective and independent the internal audit function is, how objective and competent it is, and how it improves and evaluates control frameworks, advocates for risk, and promotes effective governance). In relation to reports, the quality of financial reporting (FRQ) is based upon how reliable, clear, timely, and accurate that financial report is to make sound decisions by reporting stakeholders (Alali & Foote, 2012; Ramanna & Sletten, 2009; Saifudin & Janie, 2020). Financial institutions in Pakistan provide a basis for reliable financial reporting through their ICL; however, the effectiveness of integrated financial reporting all too often depends on providing the required level of IAQ. Thus, IAQ is viewed as a mediator concerning the relationship between ICL and FRQ. As a result, IAQ is hypothesized to mediate the connection between ICL and FRQ; both ICL and FRQ involve structural controls.

Hypothesis 2: ICL has a significant effect on IAQ
Hypothesis 3: IAQ has a significant effect on FRQ
Hypothesis 4: ICL has a significant effect on FRQ
Hypothesis 5: IAQ mediates the relationship between ICL and FRQ

3. Methodology

The present study investigates auditors that work in financial institutions, particularly commercial banks and other regulated financial institutions in Southern Punjab, Pakistan. Analysts have a primary function in assessing the corporate governance frameworks, ICL, and financial reporting mechanisms. As such, auditors are a critical and valuable unit of study. From an agency theory perspective, auditors are a primary control mechanism to alleviate information asymmetry and agency conflicts between the principal and the agent (Jensen & Meckling, 1976). Hence, auditors in Southern Punjab financial institutions are assumed to have a well-founded, professional opinion on the Board Expertise, ICL, IAQ, and FRQ. The target population consists of internal, external, audit managers, and senior audit officers employed in banks and other financial institutions in the major districts of Southern Punjab. Given their direct involvement in the design, execution, and assessment of ICL and audit standards, these professionals are best suited to evaluate the state of corporate governance and its impact on the quality of financial reporting. Previous studies on governance and auditing underscore the need to capture the perspectives of audit professionals due to their specialised knowledge and firsthand involvement in the financial reporting cycle (DeFond & Zhang, 2014; Abbott, Parker, & Peters, 2016). Based on the population, the sample size of the current study is 382.

Scale items for board expertise are adapted from Kaawaase et al. (2021), ICL are adapted from Ondieki (2013), IAQ are adapted from Kaawaase et al. (2021) and FRQ are adapted from Ondieki (2013). Out of a total of 800 questionnaires, 392 questionnaires were found to be complete and valid and were retained for the final analysis. Finally, 392 valid responses were used for data analysis. Data analysis was carried out by using PLS-SEM. It is a multivariate technique used to analyze complex associations between observed and latent variables, often for prediction or theory development. It is grounded on two steps, measurement model and structural model. In Addition, this study considered common method bias by using full collinearity through Variance Inflation Factor (VIF) and all values were found less than 3.3 (Hameed, Nisar, & Wu, 2020). PLS-SEM was chosen over covariance-based SEM (CB-SEM) since this study's main aim was to predict the relationships between the governance constructs, and not to validate the existence of a known covariance structure. Furthermore, the proposed model includes several latent constructs and mediation pathways, which make PLS-SEM the most suitable analysis method for maximizing the explained variance value of the endogenous variables, and testing complex predictive models. It is important to note that, according to the methodological recommendations, PLS-SEM is particularly suitable for research that focuses on prediction; theory extension; and analysis of complex structural relationships between the latent variables (Hair et al., 2017).

4. Data Analysis and Findings

Data analysis through Partial Least Squares Structural Equation Modelling (PLS-SEM) has two steps. The analytical process begins with measurement model (also referred to as the outer model) and ends with structural model (also referred to as the inner model) (Hair et al., 2017; Hair Jr et al., 2022). These two models (measurement and structural) are examined individually for future analyses. The first (measurement/outer) model established reliability and validity of each construct through an analysis of individual observed variables used within the study. In other words, the researchers used the measurement (outer) model to confirm that each construct has a positive relationship with the observed variable(s) associated with that construct (Hair Jr et al., 2017; Ke et al., 2024). Once reliability and validity of the respective constructs are established, the structural (inner) model confirmed the hypothesised relationships among the latent constructs. The subsequent section included an analysis of measurement (outer) model and analysis of structural (inner) model for this study. The measurement model evaluation offers substantial proof of construct adequacy and durability within the study.

To begin with, all factor loadings are over the accepted level of 0.70; therefore, all observed items make a significant contribution to their latent construction, and the measurement items are well suited to reflect the theoretical ideas of board expertise, ICL, IAQ, and FRQ. All constructs meet internal consistency reliability as both Cronbach's alpha and composite reliability (CR) scores are over the minimum level of 0.70; with majority of the constructs exceeding the 0.90 CR level, indicating a strong consistency among the measurement items—this demonstrates that all items within a construct measure the same underlying concept in a reliable manner (Hair, 2007; Hair Jr et al., 2016). In addition, convergent validity is evidenced by all Average Variance Extracted (AVE) being above 0.50 therefore, indicating that each construct accounts for more than 50% of the variance of its respective indicators (Anis et al., 2020; Stöber, 2001); therefore, the items used to measure each construct effectively converge on that particular construct. In terms of convergence, board expertise possesses superior levels of convergence when compared to the other three constructs, due to the significantly greater explanatory power exhibited by its respective indicators. Table 1 reported the factor loading and reliability with AVE. Additionally, discriminant validity was assessed by using HTMT, as shown in Table 2.

Table 1: Convergent Validity

Construct	Item	Loading	Cronbach's Alpha	CR	AVE
Board Expertise (BE)	BE1	0.812	0.861	0.915	0.782
	BE2	0.891			
	BE3	0.936			

Internal Control (ICL)	IC1	0.754	0.903		0.925	0.673
	ICL2	0.812				
	ICL3	0.845				
	ICL4	0.869				
	ICL5	0.828				
	ICL6	0.801				
Internal Audit Quality (IAQ)	IAQ1	0.823	0.918		0.936	0.709
	IAQ2	0.847				
	IAQ3	0.865				
	IAQ4	0.881				
	IAQ5	0.829				
	IAQ6	0.804				
Financial Reporting Quality (FRQ)	FRQ1	0.821	0.889		0.918	0.692
	FRQ2	0.844				
	FRQ3	0.861				
	FRQ4	0.817				
	FRQ5	0.823				

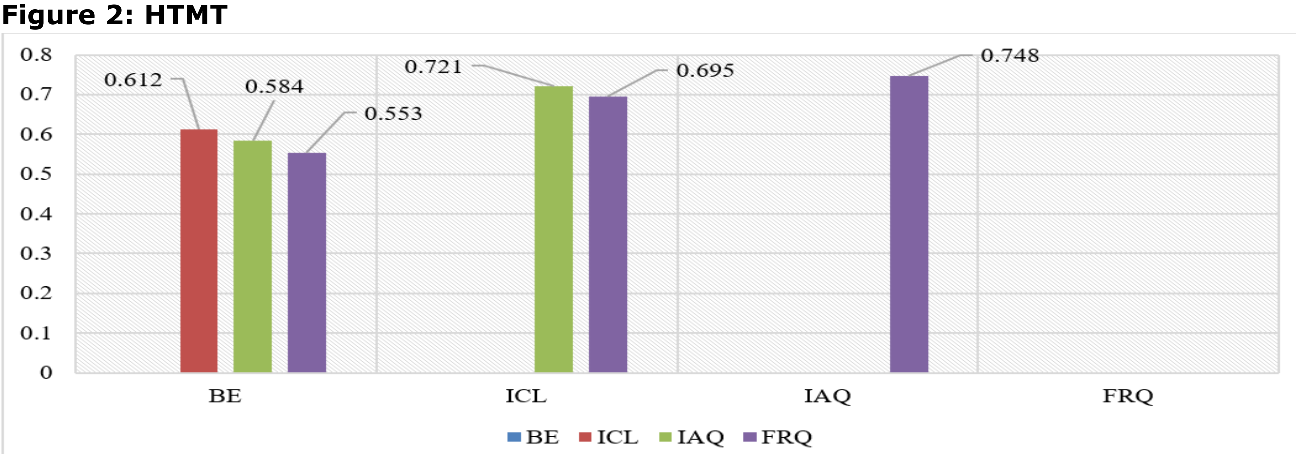
Note: BE **=** Board Expertise, Internal Control = ICL, Internal Audit Quality = IAQ, Financial Reporting Quality (FRQ)

Table 2: HTMT

Constructs	BE	ICL	IAQ	FRQ
BE	—			
ICL	0.612	—		
IAQ	0.584	0.721	—	
FRQ	0.553	0.695	0.748	—

Note: BE = Board Expertise, Internal Control = ICL, Internal Audit Quality = IAQ, Financial Reporting Quality (FRQ)

Figure 2: HTMT



Note: BE = Board Expertise, Internal Control = ICL, Internal Audit Quality = IAQ, Financial Reporting Quality (FRQ)

As indicated by the structural model results, the relationships among all the constructs can be positively identified and are all statistically significant. Specifically, the presence of knowledgeable and competent board members positively and significantly influences the effectiveness of ICL; thus, the more proficiently equipped the board members are, the greater the likelihood that the mechanisms that are put in place to provide adequate, complete, and accurate ICL will be successful. Moreover, the findings suggest that the use of ICL also positively and significantly impacts IAQ. Thus, the more established the ICL systems, the more likely quality auditing practices will occur. Additionally, there is a positive and significant correlation between IAQ and FRQ. Thus, audits play a pivotal role in ensuring that financial reports are accurate, complete, and reliable. Furthermore, as with IAQ and ICL, FRQ is also positively and significantly correlated to ICL, therefore illustrating that ICL is a necessary element in reducing the likelihood of errors occurring in financial reporting and when preparing financial statements.

Furthermore, mediation analysis indicates that IAQ acts as a significant mediator between ICL and FRQ. This means that the use of ICL impacts the quality of financial reporting in two ways: (i) through direct use and application of ICL, and (ii) through the enhancement of internal audit practices, thereby influencing the quality of financial reporting indirectly. Overall, the

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results provide previously unreported empirical findings supporting the proposed hypotheses. Table 3 and Table 4 reported the direct and indirect effect, respectively.

Table 3: Results of Direct Effect

Relationship	Beta (β)	Std. Error	t-value	p-value	Decision
BE → ICL	0.421	0.052	8.096	0.000	Supported
ICL → IAQ	0.587	0.047	12.489	0.000	Supported
IAQ → FRQ	0.463	0.058	7.983	0.000	Supported
ICL → FRQ	0.318	0.061	5.213	0.000	Supported

Note: BE = Board Expertise, Internal Control = ICL, Internal Audit Quality = IAQ, Financial Reporting Quality (FRQ)

Table 4: Results of Indirect Effect

Indirect Relationship	Beta (β)	Std. Error	t-value	p-value	Decision
ICL → IAQ → FRQ	0.272	0.043	6.326	0.000	Supported

Note: BE = Board Expertise, Internal Control = ICL, Internal Audit Quality = IAQ, Financial Reporting Quality (FRQ)

Moreover, this study examined f-square (f^2) to check the effect of independent variables on dependent variables. Most of the f^2 was found small and moderate, which proved the significant effect. On the other hand, variance explained was examined by using r-square (R^2) values which was found moderate. Additionally, q-square (Q^2) was found above zero which highlighted the satisfactory quality of the model.

5. Discussion

The objective of this study is to examine the relationship between board expertise, ICL, IAQ and FRQ. It can be concluded that more expert boards are more likely to construct or assess and, more importantly, sustain a strong internal system of controls for an organization. The relationship exists for the reason that an informed board will recognize a potential threat and, hence, ill-advised or uninformed financial and operational processes and put in place steps to anticipate control processes. Boards do not only help organizations meet legal requirements (Eldaia, Hanefah, & Marzuki, 2023; Yermack, 1996), but control boards improve and recommend an organization's operating framework by instituting control steps, such as a separation of duties (i.e. the ill-advised and operational processes), authority to make decisions, and monitoring. This strong prediction is influenced by the fact that board members are educated to have a control system in that both the technical and explanatory control system and the strategic perspective of risk management (Klein, 2002; Shafee et al., 2026). This means that operational control and regulatory compliance are less technical controlled and more board members involvement in operational control.

The results indicate that there is a significant relationship between IAQ and ICL (Aryandra, Basri, & Mariyanti, 2018; Kidwell & Jewell, 2003), therefore, ICL provides the necessary support for effective operation of the internal audit function, as well as independence from management and the organization. The presence of strong ICL mechanisms creates a structured environment for the internal auditor to perform their activities more effectively, leading to improved quality of audits performed. Furthermore, the positive relationship between IAQ and FRQ indicates that when audit quality increases, so does the accuracy, transparency and reliability of financial reports. This underlines the importance of the internal auditor in supporting the integrity of financial records. The results also confirm that a direct relationship exists between ICL and FRQ, thus effective ICL systems improve the credibility and accuracy of financial reports. Companies with effective ICL have a higher ability to prevent employee errors (Karagiorgos, Drogalas, & Dimou, 2010; Li, Liu, & Xu, 2022; Yudina et al., 2017), detect fraud and comply with applicable accounting standards and regulations. While the mediation effect of IAQ between ICS and FRQ is present, it demonstrates that the ICS indirectly improve FRQ by virtue of an increased level of IAQ. This mediation indicates how an ICS can assist in producing better reporting outcomes; therefore, the results demonstrate the complementary nature of ICS and IAQ through their combined ability to contribute to the overall improvement of financial reporting, providing a theoretical basis and evidence for improved governance and accountability.

6. Conclusion

This study has explored the relationship between BE, ICL, IAQ and FRQ in financial institutions of Pakistan. The findings show that BE is found to be a strong contributor to ICL and that effective ICL contributes to good IAQ and directly contributes to good FRQ. The results also reveal that IAQ is an important mediator between ICL and FRQ, which further underscores the need for the implementation of governance and auditing mechanisms to ensure transparent, accurate and reliable financial reporting. The results highlight that financial institutions need to improve board competencies, develop effective control systems and continually refine internal audit practices, to boost the effectiveness of governance and investor trust. This study makes a contribution to the governance and auditing literature by proposing and testing empirically an integrated framework that connects BE, ICL, IAQ and FRQ. It builds on existing literature by showing that a mediator is IAQ between the effective ICL and the better FRQ. Moreover, the study offers specific empirical evidence for Pakistan, to complement the scanty empirical research on governance effectiveness in developing economies.

6.1. Implications of the Study

The results have significant implications for both theory and practice in finance generally, and financial institutions in particular. First, the findings show that board expertise is positively related to the quality of ICL; therefore, board members who have technical expertise (in relation to financial management, auditing and regulatory matters) and actively participate in decision-making will facilitate the effectiveness of ICL and thus will strengthen the governance structure of financial institutions. Therefore, financial institutions should focus on ensuring that the composition of their boards is such that they have sufficient members who possess the necessary financial, auditing and regulatory expertise. Second, the significant association found between ICL, and audit quality indicates that well-designed ICL systems provide an environment conducive to effective internal auditing. Therefore, financial institutions should invest in designing and implementing effective ICL frameworks. In addition, the positive correlation between audit quality and FRQ indicates that high-quality audits enhance transparency, accuracy and reliability in financial reporting. Therefore, it is important to note that the direct relationship between ICL and FRQ provides strong evidence that effective governance mechanisms are critical in providing credible, timely financial reports. The mediating effect of audit quality demonstrates that ICL provide both direct and indirect (through improving audit quality) contributions to enhancing FRQ. Overall, these findings suggest that financial institutions should consider implementing an integrated governance framework whereby the mechanisms of board expertise, ICL systems and audit functions are aligned with the objective of producing superior financial reports and enhancing stakeholder confidence.

Moreover, financial institutions could also enhance the expertise of their directors by conducting regular director training programs. Directors' oversight skills can be enhanced by regular training on financial reporting standards, risk management and corporate governance, new regulatory requirements, and digital financial technologies. Institutions should also strive to have members of their boards certified by relevant professional bodies with accounting, auditing, finance and corporate governance credentials, and make provisions for regular governance workshops and executive education sessions. Further, the focus should be on competency-based appointments of the board, clear expectations of the board members, periodic review of board performance, and continuous review of board skills to make sure that boards have the required expertise to deal with ever-changing financial and regulatory landscapes. These projects will have a positive impact on the effectiveness of governance, the internal control systems, IAQ and FRQ. In Addition, regulatory authorities, particularly the SBP and the SECP, should strengthen governance regulations by promoting competency-based board appointments and periodic assessments of directors' financial and governance expertise.

6.2. Limitations and Future Directions

The research has a number of limitations even if the findings are important. First, because the study used cross-sectional data, it was difficult to establish causal links between the different variables being researched. Second, the focus on financial institutions could limit the applicability of the study's findings to other industries. Third, the study relied on respondents to

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self-report information, which could have caused bias in their responses. There are a number of potential avenues for future research that could address some of the issues noted in this study. Future research could use longitudinal research designs to study the causal linkages between different variables over time. Comparative studies across different industries and countries may improve the ability to apply research findings across industry sectors. Future studies could also use objective data on a company's finances as the outcome variables in addition to investigating additional variables such as regulatory enforcement, digital audit support and risk management practices to enhance the research design. Research could also examine the moderating roles of such variables as the company's culture and size in determining governance structure. Additionally, this study is limited to Southern Punjab, Pakistan. Future studies should consider the whole country. Finally, cross-country comparisons within South Asia could be more beneficial, which is not considered in this study.

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