

FROM EXTERNAL AUDIT ATTRIBUTES TO ORGANIZATIONAL PERFORMANCE; THE MEDIATING ROLE OF FINANCIAL REPORTING CREDIBILITY IN FINANCIAL INSTITUTIONS OF PAKISTAN

Saba Ijaz^{*1}, Ayesha Ishaq², Hunaiza Amir³, Dr. Asad Ali Mughal⁴

^{*1,2,3}Students of Department of Management Studies, Bahria University Karachi Campus.

⁴Assistant Professor, Department of Management Studies, Bahria University Karachi Campus.

^{*1}mk2333803@gmail.com , ²ayshaishq2004@gmail.com , ³amirhunaiza@gmail.com ,
⁴asadali.bukc@bahria.edu.pk

DOI: <https://doi.org/10.5281/zenodo.21718409>

Keywords

Audit Quality; Audit Technology; Audit Risk; Financial Reporting Credibility; Organizational Performance
JEL Codes: C12, C31, M42, F65

Article History

Received: 26 May 2026

Accepted: 03 July 2026

Published: 31 July 2026

Copyright @Author

Corresponding Author: *

Saba Ijaz

Abstract

This study examines the impact of external audit attributes, namely external audit quality, external audit technology, and external audit risk on organizational performance, with financial reporting credibility as a mediating variable. The research focuses on financial institutions listed on the Pakistan Stock Exchange (PSX), including banks, insurance companies, and microfinance institutions. A quantitative research approach was adopted, and data were collected from employees working in these institutions through a structured questionnaire. A total of 343 valid responses were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that external audit quality, external audit technology, and external audit risk have a significant and positive direct impact on organizational performance. However, the mediating role of financial reporting credibility was found to be insignificant. The study contributes to the existing literature by providing empirical evidence from a developing economy context, highlighting that external audit mechanisms act as direct drivers of organizational performance. The findings offer practical implications for financial institutions, regulators, and policymakers in strengthening audit practices to enhance organizational outcomes.

Introduction

The world economy is broadly divided into the manufacturing and service sectors, both of which contribute significantly to economic growth. The service sector includes financial institutions that mobilize savings, allocate capital, provide liquidity, and support economic stability (Mahmood et al., 2025; Jahangir et al., 2026; Ndirangu et al., 2026). However, weaknesses in auditing, governance, internal controls, and regulatory oversight can undermine financial reporting credibility, stakeholder confidence, and organizational performance (Nkansa, 2025; Otaibi, 2025).

Recent audit and governance concerns in Pakistani financial institutions, including the United Insurance Company of Pakistan Limited and the National Bank of Pakistan, highlight the importance of effective external auditing, risk assessment, audit technology, and credible financial reporting. Despite existing research on auditing and organizational performance, limited studies have examined the combined impact of external audit quality, external audit technology, and external audit risk on organizational performance, particularly in Pakistan's financial sector. The mediating role of financial reporting

credibility and the perceptions of employees also remain insufficiently explored. Therefore, this study examines the impact of external audit attributes on organizational performance and investigates the mediating role of financial reporting credibility among employees of PSX-listed banks, insurance companies, and microfinance institutions. Using a quantitative, explanatory, and cross-sectional design, the study is guided by Agency Theory, which explains how external auditing can reduce information asymmetry, strengthen financial reporting credibility, and improve organizational performance. The findings are expected to provide valuable insights for financial institutions, management, regulators, policymakers, and future researchers by contributing to improved governance, transparency, stakeholder confidence, and financial stability in Pakistan's financial sector. The study is structured into five chapters covering the research background, literature review, methodology, results, and discussion and conclusions.

Literature Review

Theoretical Background

This research is based on Agency Theory, which shows how shareholders and managers interact inside companies (Jensen & Meckling, 1976). Agency theory suggests that conflicts of interest arise when ownership is separated from managerial control, as managers may pursue personal objectives that do not necessarily align with the interests of shareholders (Jensen & Meckling, 1976). These conflicts are intensified by information asymmetry, where managers possess more detailed information about the firm's operations and financial condition than external stakeholders, potentially leading to opportunistic behavior and reduced transparency in financial reporting (Eisenhardt, 1989).

To reduce these agency issues, organizations use monitoring systems meant to improve accountability and openness. One of the most important mechanisms is external auditing, which serves to verify the accuracy and reliability of financial information and reduce information asymmetry between management and

stakeholders (Fama & Jensen, 1983). Efficient auditing improves corporate governance by ensuring that financial statements correctly and openly show the organization's activities, thereby protecting the interests of investors and other stakeholders. In this context, external audit elements like audit quality, audit technology, and audit risk are vital for enhancing monitoring effectiveness.

Robust auditing procedures enhance the credibility of financial reporting by guaranteeing that financial statements are compiled and displayed in a dependable and clear way. When financial reports are perceived as credible, stakeholders gain greater confidence in organizational disclosures, which can improve decision-making, strengthen investor trust, and enhance overall organizational performance (Alsmady, 2022). Therefore, Agency Theory provides an appropriate theoretical foundation for examining how external audit attributes influence organizational performance through the mediating role of financial reporting credibility.

Empirical Review

Early empirical investigations into audit and performance relationships largely focused on audit quality and firm outcomes. Rahman (2019) analyzed how audit characteristics influence company performance based on evidence from manufacturing firms on the Dhaka Stock Exchange. Audit quality was represented by BIG 4 affiliation, the size of the audit committee, and how often the audit committee met, whereas firm performance was assessed using accounting metrics like ROA, profit margin, and EPS. The findings showed that better quality external audits were linked to better firm performance, but having more audit committee meetings was connected to lower performance. These findings emphasized the importance of audit quality and governance systems in affecting organizational performance. Building on the audit quality performance linkage, Ivungu et al. (2019) conducted a comprehensive review of literature examining audit quality and firm performance. The study identified several factors that show how good an audit is, like the size of the company doing the audit, how often the

auditors change, how long they work with the same client, the type of opinion they give, and how independent they are. The review presented varied results, as certain studies indicated positive impacts of audit quality on performance, whereas others revealed negative or no significant links. The authors highlighted the necessity for additional quantitative studies, especially in developing countries, to elucidate these discrepancies.

Subsequently, Zhong (2020) investigated the relationship between audit quality and financial reporting quality using data from Chinese firms between 2000 and 2022. The results showed that strong auditing practices and solid internal controls greatly improve the trustworthiness and accuracy of financial reporting. The research strengthened the claim that audit quality is a key factor in the credibility of financial reporting, especially in settings where information is vital for business decisions.

Recent research has shifted attention toward audit risk and its implications for reporting outcomes. Le et al. (2022) examined the influence of a risk-based audit approach (RBA) on audit quality in Vietnam using survey data analyzed through structural equation modeling. The findings revealed that client risk, information technology support, auditor capacity, and competitive pressures significantly influence the adoption of RBA, which in turn positively affects audit quality. This study underscored the importance of risk-focused audit procedures in strengthening audit effectiveness.

Extending this perspective, Obiosa et al. (2025) examined how the elements of audit risk; Inherent Risk, Control Risk, and Detection Risk, impact the accurate portrayal of financial statements in Nigerian manufacturing companies. The findings indicated that although Inherent Risk did not have a significant effect, Control Risk adversely affected faithful representation, while Detection Risk positively and significantly influenced it. These results highlighted the importance of risk assessment and internal control systems in improving the reliability of financial reporting.

In the same vein, Putri and Arum (2025), via a systematic literature review of research published

from 2018 to 2025, verified that audit risk has a considerable impact on audit quality. The assessment emphasized that the combination of technological integration, ethical standards, and institutional capacity enhances the connection between audit risk and audit quality. The research indicated the creation of more flexible audit models in reaction to digital transformation.

As the attention on risk has been increasing, recent research has also been looking more closely at how audit technology can improve the results of audits. Atta et al. (2024) investigated the adoption of Computer-Assisted Audit Techniques (CAATs) among Jordanian auditors and found that performance expectancy and effort expectancy significantly influence CAAT adoption. The study highlighted that using technology improves the efficiency and effectiveness of audits.

Tinyase (2025) further examined the relationship between technology adoption and audit quality, incorporating auditor experience as a moderating factor. Using survey data from 385 auditors, the findings demonstrated that technology positively affects audit quality, with stronger effects observed among more experienced auditors. This highlighted the complementary role of technological capability and human expertise in improving audit performance.

Winarningsih et al. (2025) advanced this research by examining the effect of Big Data Analytics on audit quality through SEM-PLS methodology. The results indicated that Big Data Analytics notably improves audit quality, accounting for a considerable amount of its variance. The research validated the Technology Acceptance Model, showing that the perceived usefulness and simplicity of digital tools enhance the effectiveness of audits.

Wassie (2025) extended the focus from audit quality to explore the wider performance effects of audit technology. The research into Ethiopian audit firms revealed that adopting CAAT enhances non-financial performance results notably, including operational efficiency, client relations, and employee involvement. Organizational readiness was recognized as a moderating variable, strengthening the strategic

importance of technology in improving performance.

Liang et al. (2025) also examined the link between digital audit skills and detection risk with data from audit firms in China. The outcome showed that having sufficient digital audit skills notably decreases detection risk and improves audit digitization, even though digitization might bring some risks. The research emphasized the linked pathways among talent, technology, and risk management.

Albahrun et al. (2025) aggregated research from 2015-2025 to analyze how improvements in audit quality bolster the reliability of financial reporting. The assessment found that enhancements in governance systems, risk-focused auditing methods, and the efficiency of audit committees correlate with reduced discretionary accruals, fewer restatements, and more trustworthy financial reporting results.

While earlier studies have separately explored audit quality alongside firm performance, audit risk and reporting credibility, as well as audit technology and audit quality, there is a scarcity of research that combines these external audit characteristics into a cohesive framework to assess their joint influence on organizational performance. Furthermore, the supportive role of financial reporting credibility in connecting external audit attributes, namely audit quality, audit risk, and audit technology, to organizational performance is still inadequately investigated, especially in financial institutions within developing economies.

Hypotheses Development

Organizational Performance

Organizational performance is often seen as a main way to measure how well an organization reaches its goals and objectives. This multidimensional perspective highlights the importance of integrating both objective and perceptual measures when evaluating organizational outcomes (Guterman, 2023). According to recent open-access research, organizational performance refers to how well an organization achieves its goals and fulfills its mission through efficient and effective operations

(Al-Haddad et al., 2025). Similarly, Bozic (2023) defines OP as the degree to which an organization effectively and efficiently utilizes its human and non-human resources to accomplish its mission and organizational objectives. Furthermore, scholars highlight that organizational performance is a multifaceted concept that includes both financial and non-financial results, such as profitability, operational efficiency, customer satisfaction, and market competitiveness (Navarro & Naranjo, 2025).

From a measurement point of view, OP can also be seen as how well an organization meets its planned goals and objectives by looking at what it actually produces compared to what was expected (Adu & Ajigboso, 2024). In contemporary research, the concept is also viewed from a stakeholder perspective, where organizational performance represents the extent to which an organization fulfills the expectations of its key stakeholders such as shareholders, employees, and customers (Mukhsin & Suryanto, 2022). Additionally, performance assessment systems are utilized to evaluate the efficiency and effectiveness of organizational operations and to ascertain how effectively organizations transform inputs like resources, capabilities, and management processes into favorable outputs and outcomes (Xu et al., 2022).

Because of its complex characteristics, organizational performance has been extensively used as a dependent variable in management and business research, indicating the overall success of organizations in fulfilling strategic goals and maintaining competitive advantage (Sarwar, 2024). Richard et al. (2009) also offer an extensive perspective on OP, defining it as a multidimensional concept that includes financial performance, product market performance, and shareholder return. Based on these perspectives, OP in this research pertains to the degree to which financial institutions effectively achieve their strategic and financial objectives, sustain competitive positioning, and enhance overall organizational effectiveness.

External Audit Quality

DeAngelo (1981) explained audit quality as the chance that an auditor will both find a mistake in the client's accounting and report it properly, according to what the market thinks. Audit quality is typically characterized as the likelihood that an auditor will identify significant misstatements in financial statements and report them correctly (Ivungu et al., 2019). It conceptualises audit quality as a joint function of auditor competence and auditor independence, emphasising the role of reputational capital and litigation risk (Kaluwila & Mpundu, 2026).

DeAngelo was one of the first people to explain audit quality as the general chance that an auditor will find and report serious errors in the financial statements. This basic definition emphasizes two important aspects: the auditor's ability to identify uncertainty and its independence in disclosing uncertainty (Garefalakis et al., 2025). Audit quality is further defined as the probability that an auditor discovers material misstatements in a client's accounting system and report them (Pramono & Idawati, 2026). Audit quality should not be seen as a binary concept, but as a continuum determined by a variety of factors, such as the size of the audit firm, its field specialization, and the strength of the legal and institutional environment (Garefalakis et al., 2025).

According to the IAASB, audit quality is more than just the results of integrity tests the behavior of individual auditors, the functioning of systems and culture within the audit firm, and external factors such as regulatory structures and stakeholder expectations (Garefalakis et al., 2025). In this study, audit quality specifically pertains to EAQ, defined as the extent to which external auditors demonstrate competence, independence, and professional rigor in detecting and reporting errors in reports.

External Audit Technology

Early conceptualizations defined audit technology as part of the auditor's "tool kit." Elliott and Jacobson (1987) described audit technology as any tools intended to improve the auditor's ability to execute audit functions efficiently. Expanding on this view, Yeow & Siew (2013) characterized audit

technology as the application of technological instruments to aid auditors in executing audit procedures, which encompasses electronic spreadsheets, generalized audit software, embedded audit modules, database search and retrieval systems, parallel simulation software, and test data methods. More recent studies broaden the concept to incorporate information technology integration within audit processes. Katamba (2025) defines audit technology as technological tools that combine auditing techniques with IT systems, sophisticated software, and computer applications to support transaction processing and financial reporting. Similarly, Noor et al. (2022) emphasize that audit technology enhances fraud detection, audit quality, and decision-making by enabling timely and accurate financial information.

Eulerich et al., (2023) explain that technology-based audit methods are also called automated audit tools. These include software used for general audits, computer programs designed for auditing, data analysis tools, and Computer-Assisted Audit Techniques (CAATs). Thottoli et al. (2022) argue that emerging digital technologies improve audit efficiency, reduce operational costs, and enhance audit quality. In a wider context of IT-enabled auditing, Santoso (2020) emphasizes technologies like artificial intelligence, blockchain, cloud computing, and robotic process automation as key elements that transform contemporary auditing.

Likewise, Permana & Puspitadewi (2023) define audit technology as computer-based tools that facilitate the collection and evaluation of audit evidence more accurately and efficiently. In this study, the idea is focused on EAT, which means use of advanced technology and digital systems by external auditors to carry out audit tasks and properly assess financial information.

External Audit Risk

Earlier academic and professional discussions on audit risk mainly emphasized the possibility that auditors could issue an incorrect opinion when financial statements include material misstatements (Holmes, 2025). Over time, professional bodies formally defined the concept.

IFAC, in Standard No. 200 (2007), explained audit risk as the chance that an auditor gives the wrong opinion when the financial statements have major errors. This definition reinforced the connection between audit risk and the reliability of financial reporting. In a similar vein, the American Institute of Certified Public Accountants (AICPA) linked audit risk to the identification and evaluation of risks associated with material misstatements that require particular audit attention, emphasizing the importance of structured risk assessment procedures (Nikolovska et al., 2016).

A more structured and widely accepted definition was later provided by IAASB in its Glossary of Terms, which defines audit risk as the chance that an auditor gives the wrong opinion when the financial statements have big mistakes. The IAASB also explained that audit risk comes from two things: the risk that there are major errors in the financial statements and the risk that these errors are not found. This makes the framework more organized, which helps in understanding the theory better and using it in real situations. Scholars have expanded on this definition; for instance, Eze, G. (2013) explained audit risk as the chance that significant assertions related to transactions, balances, or disclosures may include material misstatements that the auditor fails to identify.

Additionally, Nikolovski et al. (2016) described audit risk as the risk encountered by auditors when they fail to uncover and report material errors in financial statements, emphasizing its disclosure-related dimension. More recently, Al-Hajri et al. (2026) explained that audit risk is the chance that auditors might not realize there are big errors in the financial statements and could give the wrong opinion, which matches what is said in international auditing standards. Within the scope of this study, EAR specifically relates to external audit risk which refers to the likelihood that external auditors detect material misstatements or irregularities in financial statements and respond with appropriate audit procedures.

In this study, this construct is further interpreted in the context of audit risk assessment practices,

where external audit risk is evaluated through the auditors' ability to identify, assess, and respond to potential misstatement risks during the audit process. Accordingly, the variable captures the risk-based evaluation mechanism used in external auditing rather than only the probability of detection failure. This broader operationalization aligns with the practical application of audit risk assessment tools, which guide auditors in planning and executing effective audit procedures to enhance financial reporting reliability.

Financial Reporting Credibility

Financial reporting credibility refers to the extent to which financial statements are perceived as reliable, accurate, unbiased, and free from material misstatements (Santos & Juita, 2025). Similarly, Okpala (2012) defines it as the degree to which financial information can be trusted and is free from manipulation or fraudulent elements. Recent literature has broadened this concept beyond accuracy to include stakeholder trust and accountability. Liang et al. (2018) emphasized that credibility reflects the level of confidence investors place in reported earnings, believing them to be reliable and not misleading. Tontiset and Kaiwinit (2018) described FRC as the reliability of published financial statements in providing useful information that supports economic decision-making and contributes to efficient resource allocation, ultimately enhancing organizational performance. Over time, the concept has evolved from focusing primarily on accuracy and fraud prevention to incorporating transparency, investor confidence, and improved decision-making outcomes.

Organizational Performance and External Audit Quality

AQ is widely acknowledged as an essential tool in strengthening capital markets and enhancing corporate governance (Sattar et al., 2020). Transparent reporting not only improves investor confidence but also promotes effective governance practices within organizations (Sattar et al., 2020). Prior empirical studies suggest that audit quality positively influences firm performance. For instance, Al-Ani and Mohammed, (2015) argue

that improved audit quality contributes to better firm performance by enhancing financial reporting integrity. Similarly, DeAngelo (1981) conceptualizes audit quality as an external corporate governance monitoring mechanism that can improve firm performance. Supporting this view, Ziaee (2014) finds that firms listed on the Tehran Stock Exchange experience improved financial performance with higher audit quality (Sattar et al., 2020). Auditor independence is considered a fundamental determinant of audit quality. Research indicates that greater auditor independence, often achieved through mechanisms such as audit firm rotation, leads to higher audit quality and improved firm performance (Sattar et al., 2020).

Moreover, Audit committee independence was considered positive with firm performance (Satar & Hussain, 2011). Rustam et al. (2013) further highlight that independent audit committees significantly influence audit fees and auditor performance, particularly in the Pakistani context. The size and effectiveness of the audit committee are key factors reflecting audit quality. Miettinen (2011) demonstrates that audit committee size has a direct and significant impact on firm performance, while Barako et al. (2006) identifies a positive correlation between audit committee size and corporate disclosure. Large firms also invest substantial resources in ensuring high audit quality to reduce errors and financial misstatements, which subsequently enhances organizational performance (DeAngelo 1981; Beatty 1989). While certain research indicates a negligible link between audit quality and company performance (Elewa & Haddad, 2019; Mehran et al., 2022), the majority of empirical findings endorse a positive and significant correlation between audit quality and financial performance metrics like ROA and ROE (Mehran et al., 2022). External audits of high quality boost the reliability of financial statements, decrease information asymmetry between management and stakeholders, and curb opportunistic behavior by management. By improving transparency and accountability, audit quality strengthens investor trust and facilitates better access to capital, which ultimately enhances operational efficiency and

financial outcomes. Therefore, audit quality serves as an effective governance mechanism that promotes sustainable organizational growth and improved overall performance. Considering the theoretical foundations and empirical findings discussed above, it can be inferred that audit quality constitutes a crucial governance mechanism that strengthens monitoring effectiveness and ultimately contributes to the sustained improvement of organizational performance.

H₁: There is a significant impact of external audit quality on organizational performance.

Organizational Performance and External Audit Technology

Technological adoption in auditing, including tools like CAATs, Big Data Analytics, and other IT-enabled methods, has greatly changed how auditors gather evidence, evaluate risks, and carry out detailed audit procedures (Nasrah et al., 2023). Recent research from Ethiopian audit firms shows that using CAATs is strongly linked to better performance in areas like operational efficiency, customer relationships, and employee engagement. This suggests that audit technology can impact more than just compliance, influencing a range of performance aspects (Wassie, 2025). Evidence from Egypt also suggests that external auditors' adoption of big data and analytics tools shapes how audits are conducted, highlighting the practical relevance of advanced technology in external audit practice (Abdelwahed et al., 2024).

Similarly, studies exploring Big Data Analytics in auditing contexts have found that technological tools significantly enhance audit quality and audit process outcomes, suggesting that advanced analytics capabilities contribute to efficiency and effectiveness in audit engagements (Winarningsih et al., 2025; Ditkaew & Suttipun, 2024). Research employing the Technology Acceptance Model further supports the theoretical premise that auditors' acceptance and use of technology influences critical audit outcomes, providing a theoretical bridge between technology adoption and performance implications (Al-Ateeq et al., 2022). Together, these findings offer support for

examining the link between EAT and OP. In companies that are publicly listed, where technology is important for auditing and reporting, it's important to check if how employees feel about using audit tools has an effect on the company's overall performance.

H₂: There is a significant impact of external audit technology on organizational performance.

Organizational Performance and External Audit Risk

OP indicates how well a firm survives, grows, and creates value for its stakeholders. Audit Risk Assessment (ARA) is an essential part of the external audit process that enables auditors to identify, evaluate, and respond to potential audit risks within an organization. Through audit risk assessment procedures, auditors obtain a deeper understanding of the entity's operations, internal control systems, and areas that may be exposed to material misstatements or irregularities. The effective assessment of audit risk helps auditors focus their efforts on high-risk areas, improve audit planning, and enhance the overall quality of the audit process (Mujalli, 2024). As a result, organizations benefit from more reliable financial reporting, stronger internal controls, improved transparency and better managerial decision-making (Hazaea et al., 2024). Audit risk assessment also assists management in identifying weaknesses and potential threats that may affect organizational objectives, thereby enabling timely corrective actions and more efficient resource utilization (Ardianingsih et al., 2024).

In the context of Pakistan, where organizations often face challenges related to governance, internal control effectiveness, and financial reporting credibility, audit risk assessment serves as an important mechanism for identifying audit risks and strengthening accountability. Effective identification and evaluation of audit risks contribute to enhanced organizational effectiveness, fraud prevention, stakeholder confidence, and ultimately improved organizational performance (Khan et al., 2020). Therefore, although audit risk itself reflects the

possibility of material misstatements remaining undetected, the process of audit risk assessment helps identify and manage these risks effectively, leading to better organizational outcomes and superior performance. Strong risk assessment and control systems, which are key aspects of audit risk mitigation are linked to organizational performance (Salin et al., 2025). Based on the literature and theory discussed, here is the hypothesis that is being proposed:

H₃: There is a significant impact of external audit risk on organizational performance.

Organizational Performance, External Audit Quality & Financial Reporting Credibility

EAQ is very important for making sure that the financial information shared by companies is trustworthy. Previous research shows that auditing helps make financial statements more accurate and builds confidence among people who rely on that information. How well a company's financial reporting works depends a lot on how good its audits are (Rahman et al., 2023). High-quality audits increase transparency and financial statements, which contributes to stronger trust among stakeholders. Research on EAQ and reporting systems indicates that audit processes improve the credibility and reliability of disclosures, strengthening the usefulness of financial reports for decision making. As stated in the literature, EAQ has emerged as a vital assurance mechanism to enhance the credibility and reliability of sustainability disclosures (Ilias & Zin, 2025). Audit committee characteristics such as sustainability expertise and independence can improve both financial credibility performance and disclosure quality through more robust internal oversight (Ilias & Zin, 2025). Credible financial reporting is widely recognized as a determinant of organizational effectiveness and performance. Financial reports that are accurate and transparent provide decision-useful information for investors, managers, and regulators. Prior research notes that the quality of financial reporting can be assessed based on the reliability and accuracy of the company's financial data (Gardi et al., 2023).

Furthermore, empirical evidence suggests that improvements in financial reporting quality positively influence organizational outcomes. For example, research examining public organizations found that the quality of financial reporting has a positive effect on the performance of public organizations (Saputra et al., 2024). These results together show that EAQ makes financial reporting more trustworthy, and trustworthy financial reports help organizations make better decisions and achieve better performance. So, FRC can be a key way that EAQ affects OP. Based on these ideas and the evidence, the following hypothesis is suggested:

H₄: Financial Reporting Credibility mediates the relationship between external audit quality and organizational performance.

Organizational Performance, External Audit Technology & Financial Reporting Credibility

Technological advancements in auditing, such as CAATs, data analytics, and other digital tools, have significantly changed how auditors carry out their work and assess financial data (Nasrah et al., 2023). Studies show that these technologies help auditors handle large sets of accounting information more effectively, reduce the need for manual tasks, and make the audit process more efficient and reliable (Atta et al., 2024). Such technological capabilities allow auditors to perform more comprehensive tests of financial transactions, identify anomalies, and strengthen audit evidence collection during financial statement audits (Agwupuye, 2023). Empirical evidence also demonstrates that using CAATs and other audit tools helps make audit results better and more trustworthy. These tools make data analysis more accurate and lower the chance of mistakes in financial reports (Omonuk & Oni, 2015). Similarly, studies examining the application of technology-based audit techniques show that the integration of digital tools in auditing improves audit efficiency, audit effectiveness, and overall audit task outcomes (Eulerich et al., 2023).

Recent evidence derived from surveys suggests that the implementation of CAATs in audit firms enhances non-financial performance metrics,

including operational efficiency, employee engagement, and client relations (Wassie & Lakatos, 2025). In addition to refining audit procedures, technology utilized by auditors significantly contributes to the trustworthiness and dependability of financial statements. Information technology and audit evidence systems support effective financial disclosure practices and strengthen the transparency of financial statements, thereby increasing stakeholder confidence in reported financial information (Effio & Bassey, 2015). Aligned with this perspective, empirical studies have shown that better financial reporting quality correlates with improved company performance results, highlighting the importance of credible financial information for organizational success (Alsmady, 2022).

Collectively, the current research shows that using audit technologies improves the audit process and makes financial reports more trustworthy, and trustworthy financial reports are linked to better performance in organizations. These results indicate that FRC could serve as a significant pathway by which EAT influences OP.

H₅: Financial reporting credibility mediates the relationship between external audit technology and organizational performance.

Organizational Performance, External Audit Risk & Financial Reporting Credibility

FRC acts as an important link through which the effects of audit risk influence organizational performance (Sunday et al., 2025). External audit risk has significant implications for organizational outcomes because weaknesses in external auditing increase the likelihood that material misstatements remain undetected and unassessed, thereby reducing stakeholder confidence in financial disclosures (Obiosa et al., 2025). According to IFAC, higher levels of external audit risk are associated with greater certainty in financial reporting, which may enhance the reliability perceived by investors and other stakeholders. When stakeholders perceive higher risk in external auditing processes, their trust in reported financial information declines, which

can undermine organizational stability and performance (Grakhov & Sokolov, 2025).

Empirical evidence suggests that ineffective external monitoring mechanisms increase information asymmetry and reduce the credibility of corporate disclosures (Fathi et al., 2025). FRC helps improve OP because credible disclosures help shareholders to make better decisions (Babalola et al., 2025). Greater credibility in financial reports reduces agency conflicts and fosters accountability within organizations, which contributes to improved operational and financial outcomes (Ajaegbu & Mmayie, 2025). Organizations that maintain credible financial reporting systems are more likely to attract investors and secure external financing on favorable terms, thereby enhancing overall performance (Silva et al., 2025).

Transparent and trustworthy reporting practices also strengthen corporate reputation and stakeholder relationships, which positively influence long-term organizational success (Sunday, 2025). Within this framework, financial reporting credibility operates as a mediating mechanism that explains how external audit risk affects organizational performance. External audit risk influences the extent to which financial statements are perceived as credible, and this perception subsequently shapes stakeholder decisions that determine performance outcomes

(Pramukti, 2024). Higher level of audit risk assessment enhances the credibility of financial disclosures, which improves investor confidence and support efficient resource allocation (Ebrahim, 2024). Improved credibility reduces uncertainty in the capital market, facilitates strategic planning, and strengthens organizational competitiveness (Anjani, 2023). Conversely, elevated audit risk assessment may erode the perceived credibility of financial reports, weaken stakeholder trust, and adversely affect organizational performance (Cohen et al., 2017). Therefore, financial reporting credibility transmits the influence of external audit risk to organizational performance by shaping stakeholders' perceptions and decisions (Joksimović et al., 2025). The literature collectively supports the argument that the impact of EAR on OP becomes better understandable when FRC is considered as an intervening variable. This mediating perspective provides a comprehensive understanding of how external audit risk indirectly shapes organizational outcomes through its effect on credible financial disclosures. Based on the review of existing research and logical reasoning, the following hypothesis is suggested:

H₆: Financial reporting credibility mediates the impact of external audit risk on organizational performance.

Research Framework

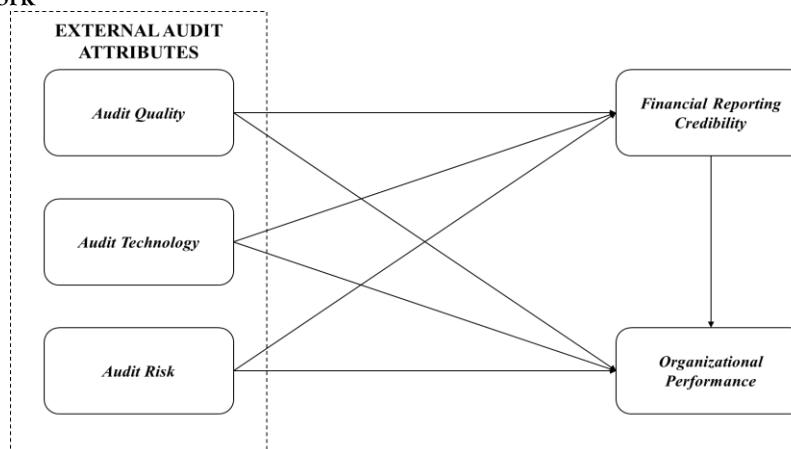


Figure 1: Research Framework

This framework highlights the analysis of our research and shows the impact of external audit attributes including audit quality, audit

technology, and audit risk on organizational performance and the mediating effect of financial reporting credibility. External audit attributes are

conceptualized as drivers of credibility of financial reporting and performance improvement of organizations.

Research Methodology

This study follows the Research Onion framework, which guides the selection of research philosophy, approach, strategy, methodological choice, time horizon, and data collection methods (Saunders et al., 2007). A positivist philosophy and deductive approach were adopted because the study examines measurable relationships among External Audit Quality (EAQ), External Audit Technology (EAT), External Audit Risk (EAR), Financial Reporting Credibility (FRC), and Organizational Performance (OP) through hypothesis testing and statistical analysis (Bryman, 2016). A quantitative survey strategy was used to collect primary data through a structured questionnaire containing items measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The study employed a cross-sectional design, with data collected at a single point in time. The unit of analysis consisted of individual employees working in financial institutions, including banks, insurance companies, and microfinance institutions listed on the Pakistan Stock Exchange.

Due to the unknown population size, the population was considered large. Although a sample size of 384 is commonly recommended, the study obtained 343 valid responses, which were considered adequate for analysis. Purposive and snowball sampling techniques were used to select respondents with relevant knowledge of auditing and financial reporting. The questionnaire measured five constructs: EAQ, EAT, EAR, FRC, and OP, using items adapted from previously validated studies. Content validity was assessed by five experts, resulting in I-CVI values ranging from 0.80 to 1.00, an S-CVI of 0.984, and Expert Agreement of 0.92, indicating strong content validity. Data were analyzed using descriptive and inferential statistical techniques to examine the direct relationships among the variables and the mediating role of FRC.

Findings

Demographics Analysis

This section presents the demographic characteristics of the respondents, including gender, age, position, education, department, and type of financial institution. The distribution helps in understanding the sample composition and its relevance to the study.

Table 2: Demographics

		Frequency	Percentage
Gender	Male	270	78.7%
	Female	73	21.3%
Age Group	Less than 30 years	113	32.9%
	31-40 years	128	37.3%
	41-50 years	91	26.5%
	Greater than 50 years	11	3.2%
Management Level	Non-Managerial Level	77	22.4%
	Supervisory Level	84	24.5%
	Middle Level	157	45.8%
	Top Level	25	7.3%
Qualification	Diploma	36	10.5%
	Undergraduate	192	56.0%
	Graduate	111	32.4%
	Post Graduate	4	1.2%
Department	Finance	117	34.1%
	Audit	50	14.6%

Financial Institution	Accounts	151	44.0%
	Risk	25	7.3%
	Conventional Bank	171	49.9%
	Islamic Bank	51	14.9%
	Insurance Company	77	22.4%
	Micro-Finance Institutions	44	12.8%

The demographic profile of the respondents indicates a significant gender imbalance, with 78.7% of the sample being male, while the remaining 21.3% were females. Regarding the age distribution, the substantial majority of the participants, 37.3%, fell within the 31–40 years' age bracket, followed by 32.9% who were less than 30 years old. Those aged 41–50 years accounted for 26.5%, while only 3.2% of respondents were greater than 50 years of age. In terms of organizational hierarchy, 45.8% of the sample occupied Middle Level management positions, whereas 24.5% were at the Supervisory Level and 22.4% at the Non-Managerial Level; only a small fraction, 7.3%, represented Top Level management. Educational qualifications showed that 56.0% of the participants were undergraduates, with 32.4% holding Graduate degrees, while 10.5% held a diploma and 1.2% were post-graduated.

Data regarding departmental distribution revealed that 44.0% of respondents worked in Accounts,

34.1% in Finance, and 14.6% in Audit, with the remaining 7.3% in Risk management. Finally, looking at the types of financial institutions, approximately half of the sample, 49.9%, originated from Conventional Banks, followed by Insurance Companies at 22.4%, Islamic Banks at 14.9%, and Micro-Finance Institutions representing 12.8% of the total.

PLS-SEM

The study used Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine how the different variables in the research are connected and to test if the hypotheses were supported.

Measurement Model

The measurement model was checked to make sure the ideas used in the study are reliable and valid. This involved looking at how well each part works, how consistent the results are, how well the ideas relate to each other, and how different they are from each other.

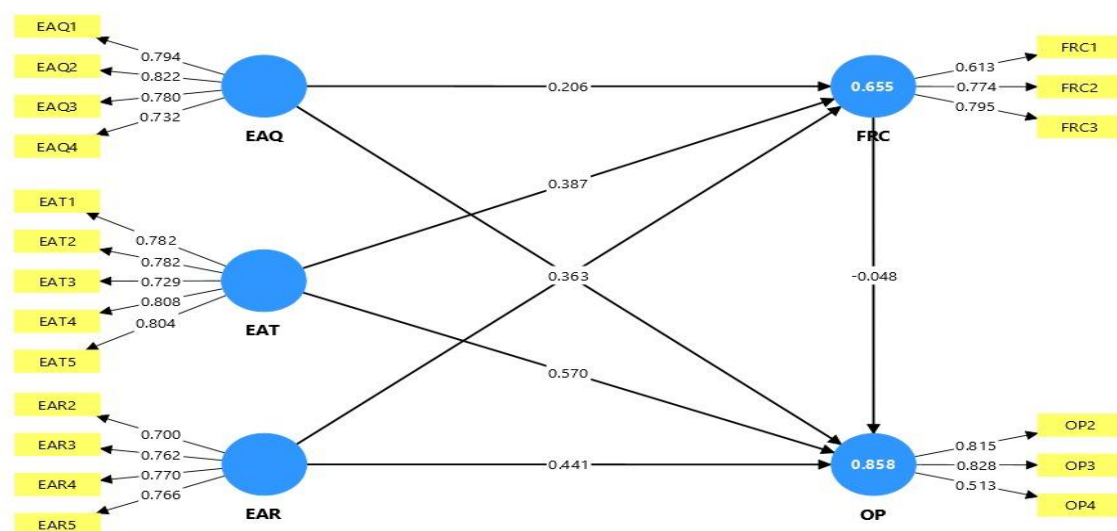


Figure 2: Measurement Model

The measurement model focuses on the reliability and validity of the constructs by examining the outer loadings. Most indicators for EAQ, EAT, and EAR exhibit strong factor loadings above the 0.70 threshold, suggesting that the items effectively represent their respective latent variables. However, in the OP construct, item OP₄ shows a lower loading of 0.513, and FRC₁ shows 0.613. Regarding the model's predictive power, the R² values indicate that the independent

variables explain 85.8% of the variance in OP and 65.5% of the variance in FRC. This suggests a high level of explanatory power, particularly for the OP outcome.

Outer Loadings

Outer Loadings reflect the strength of each connection indicator and its respective construct. They are used to assess indicator reliability in the measurement model.

Table 3: Outer loadings

	EAQ	EAR	EAT	FRC	OP
EAQ1	0.794				
EAQ2	0.822				
EAQ3	0.780				
EAQ4	0.732				
EAR2		0.700			
EAR3		0.762			
EAR4		0.770			
EAR5		0.766			
EAT1			0.782		
EAT2			0.782		
EAT3			0.729		
EAT4			0.808		
EAT5			0.804		
FRC1				0.613	
FRC2				0.774	
FRC3				0.795	
OP2					0.815
OP3					0.828
OP4					0.513

According to Arifin Djakasaputra & Tony Nawawi (2024), the value will be removed from the model if it does not reach the minimum threshold of 0.5. Hair et al. (2024), suggests a more stringent criterion of 0.7 for stronger indicator reliability. In this study, almost all constructors and their respective indicators exceed the rigorous 0.7 loading criterion, demonstrating high indicator reliability. The 0.5 threshold is utilized only for the final value (OP₄), while the remaining results comfortably meet the higher benchmark, ensuring the model's variables are effectively measuring

their intended constructs. Since FRC serves as a mediating variable, its strong indicators imply that EAQ, EAR, and EAT significantly influence financial reporting credibility, which in turn affects organizational performance.

R Square

R-square shows how much of the change in the outcome variable is explained by the other variables in the model. It tells you how well the model can explain the data.

Table 4: R Square

	R-square	R-square adjusted
FRC	0.655	0.652
OP	0.858	0.857

The regression model for FRC exhibits a solid fit to the data, as indicated by the R-squared value of 0.655. It suggests that the independent variables included in the model explain approximately 65.5% of the variance in Financial Reporting Credibility, as evidenced by an adjusted R-squared value of 0.652. The regression model for OP demonstrates an excellent fit for the data, with an R-squared value of 0.858. This indicates that the independent variables account for 85.8% of the

variance in Organizational Performance, supported by a strong adjusted R-squared value of 0.857.

F Square

F-square measures how much each independent variable affects the dependent variable. It is used to evaluate the effect size within the structural model.

Table 5: F Square

	EAQ	EAR	EAT	FRC	OP
EAQ				0.073	0.041
EAR				0.217	0.641
EAT				0.266	0.110
FRC					0.006
OP					

The F-squared values for EAQ, EAR, EAT, FRC, and OP reveal varying influences on financial reporting credibility and organizational performance. EAQ has a small effect on FRC with the value of 0.073 and little impact on OP (0.041), indicating limited influence. In contrast, EAR shows a medium effect on FRC with the value of 0.217 and a large effect on OP (0.641), highlighting its significance for organizational performance. EAT has a medium effect on FRC

with the value of 0.266) and has an effect on OP (0.110) while FRC has a small effect on OP (0.006).

Construct Reliability and validity

Construct reliability and validity check how consistently and accurately the model measures the underlying concepts it is supposed to represent.

Table 6: Construct Reliability and validity

	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
EAQ	0.789	0.793	0.863	0.613
EAR	0.740	0.743	0.837	0.563
EAT	0.840	0.841	0.887	0.611
FRC	0.760	0.778	0.774	0.536
OP	0.781	0.649	0.770	0.538

The data demonstrates acceptable internal consistency reliability, as most constructs show Cronbach's Alpha values close to or above the threshold of 0.7 (Zhao et al., 2025). To check validity, we looked at the Average Variance Extracted (AVE). The results show that all AVE values are above 0.5 (Nguyen et al., 2025), which means the constructs have good convergent validity. The results of the measurement model indicate satisfactory reliability and validity. Hence, the measurement model is reliable and suitable for further structural analysis.

Discriminant Validity

Discriminant validity evaluates whether the constructs are distinct and not highly correlated with each other.

Heterotrait-monotrait ratio (HTMT)-Matrix

HTMT is used to check discriminant validity by looking at how similar different constructs are. In order to check the discriminant validity, the results were generated by using the PLS-SEM software. The results for HTMT are reported in table # 7.

Table 7: Heterotrait-monotrait ratio (HTMT)-Matrix

	EAQ	EAR	EAT	FRC	OP
EAQ					
EAR	0.765				
EAT	0.662	0.715			
FRC	0.876	0.893	0.831		
OP	0.890	0.839	0.811	0.842	

Discriminant validity using the HTMT criterion is established when values are below 0.90, indicating that constructs are empirically distinct from each other (Henseler et al., 2015). In the provided table, all values are below the 0.90 threshold, ranging from 0.662 to 0.893. Specifically, the highest observed value is 0.893 which is showing the relationship between EAR and FRC, which is marginally below the 0.90 limit. Since all HTMT ratios in this matrix do not exceed 0.90, it suggests

that discriminant validity has been established for these constructs. This indicates that each construct in the model is sufficiently distinct from the others, meaning they are capturing different underlying theoretical concepts.

Fornell-Larcker Criterion

The Fornell-Larcker criterion checks discriminant validity by looking at how much variance is common between different constructs.

Table 8: Fornell-Larcker Criterion

	EAQ	EAR	EAT	FRC	OP
EAQ	0.783				
EAR	0.584	0.750			
EAT	0.539	0.567	0.742		
FRC	0.626	0.702	0.703	0.732	
OP	0.637	0.710	0.641	0.726	0.731

The Fornell-Larcker criterion shows that the square root of AVE values (diagonal elements) is higher than the inter-construct correlations in most cases, confirming adequate discriminant validity (Fornell & Larcker, 1981). All constructs EAQ, EAR, EAT, FRC, and OP demonstrate satisfactory distinctiveness, as each construct

shares more variance with its own indicators than with other constructs. However, relatively high correlations between FRC, EAR, and OP indicate that these constructs are closely related, though still within acceptable thresholds. Overall, the measurement model confirms satisfactory discriminant validity as per the Fornell-Larcker.

Table Collinearity Statistic (VIF)

Collinearity statistics (VIF) are used to check if there is multicollinearity among the predictor variables in the model.

Table 9: Table Collinearity Statistic

	VIF
EAQ1	1.657
EAQ2	1.736
EAQ3	1.554
EAQ4	1.443
EAR2	1.312
EAR3	1.462
EAR4	1.487
EAR5	1.431
EAT1	1.733
EAT2	1.791
EAT3	1.584
EAT4	2.093
EAT5	2.069
FRC1	1.079
FRC2	1.271
FRC3	1.257
OP2	1.266
OP3	1.235
OP4	1.113

The collinearity statistics show that all VIF values fall below the critical threshold of 5 (Fang et., al 2026), indicating no serious multicollinearity issues among the indicators. Most values are closer to 1, suggesting a moderate level of correlation without redundancy. Therefore, the data confirms that collinearity is not a concern and the model is

suitable for further analysis.

Structural Equation Model

The structural equation model examines how different underlying concepts are connected and checks if the expected connections in the research plan are supported.

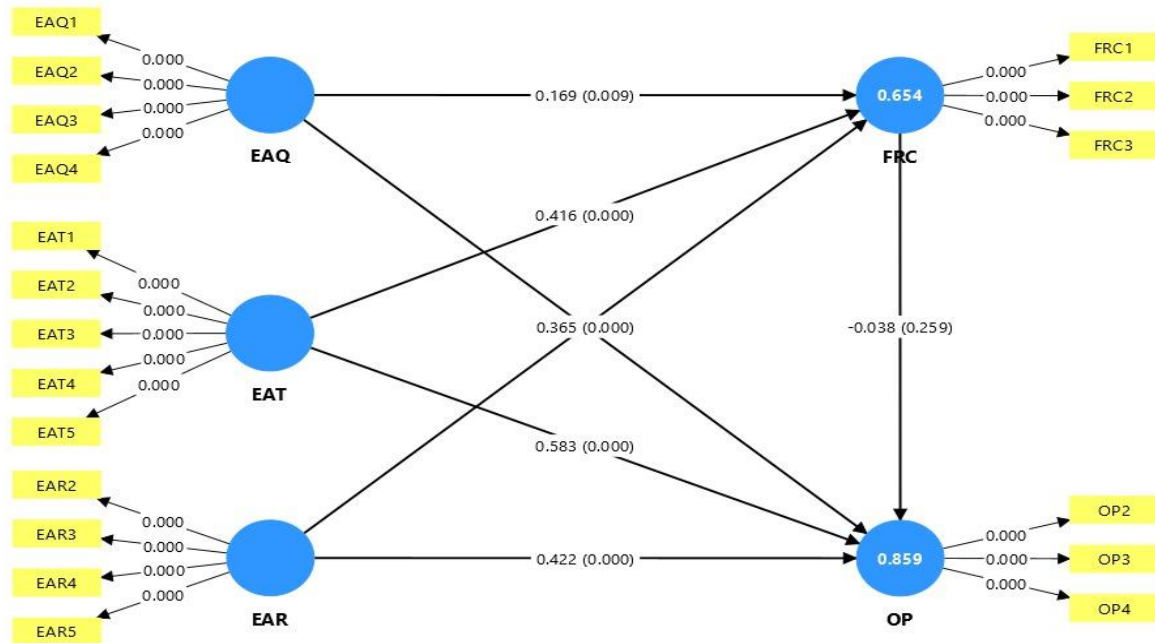


Figure 3: Structural Equation Model

The bootstrapping results provide the statistical significance of the hypothesized paths using p-values. The analysis reveals that EAT has the strongest significant positive impact on OP ($\beta = 0.583$, $p < 0.001$) and FRC ($\beta = 0.416$, $p < 0.001$). EAR also shows a highly significant positive relationship with OP ($\beta = 0.422$, $p < 0.001$). While EAQ has a significant impact on both FRC ($p = 0.009$) and OP ($p = 0.006$), its direct effect on OP is notably weak ($\beta = 0.098$). Crucially, the path from FRC to OP is non-significant ($\beta = -0.038$, p

$= 0.259$), meaning that FRC does not act as a significant predictor or mediator for OP in this specific model configuration.

Path Coefficient

Path analysis is a statistical method applied to assess both direct and indirect associations among variables in a conceptual framework. It builds on multiple regression by calculating path coefficients (β), which show the magnitude and direction of relationships between different constructs.

Table 10: Path Coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
EAQ → FRC	0.169	0.156	0.065	2.612	0.009
EAQ → OP	0.098	0.101	0.036	2.743	0.006
EAR → FRC	0.365	0.372	0.046	7.900	0.000
EAR → OP	0.422	0.418	0.039	10.827	0.000
EAT → FRC	0.416	0.415	0.038	10.876	0.000
EAT → OP	0.583	0.581	0.034	16.989	0.000
FRC → OP	-0.038	-0.033	0.034	1.129	0.259

The results of the path coefficient table show that EAQ has a positive and significant impact on both FRC ($\beta = 0.169$, $p = 0.009$) and OP ($\beta = 0.098$, $p = 0.006$). Similarly, EAR demonstrates a strong positive and significant relationship with both FRC ($\beta = 0.365$, $p = 0.000$) and OP ($\beta = 0.422$, $p = 0.000$). EAT exhibits the strongest impact among all variables. It has a significant positive effect on FRC ($\beta = 0.416$, $p = 0.000$) and an even stronger effect on OP ($\beta = 0.583$, $p = 0.000$). In contrast, the relationship between Financial Reporting Credibility (FRC) and OP is statistically insignificant ($\beta = -0.038$, $p = 0.259$).

$$OP_i = \beta + \beta_{1i}(EAQ) + \beta_{2i}(EAT) + \beta_{3i}(EAR) + \beta_{4i}(FRC) + \varepsilon_i \dots \dots \dots \text{Equation(i)}$$

$$FRC_i = \beta + \beta_{1i}(EAQ) + \beta_{2i}(EAT) + \beta_{3i}(EAR) +$$

$$\varepsilon_i \dots \dots \dots \text{Equation(ii)}$$

$$OP_i = \beta + \beta_{1i}(FRC) + \varepsilon_i \dots \dots \dots \text{Equation(iii)}$$

Whereas,

EAQ = External Audit Quality

EAT = External Audit Technology

EAR = External Audit Risk

FRC = Financial Reporting Credibility

OP = Organizational Performance

Total Indirect Effect

Total Indirect Effect represents the combined mediating influence of a variable between an independent variable which are EAQ, EAT, EAR and a dependent variable which is OP. It captures the combined impact of all indirect paths through the mediator. The result of total indirect effects is given below.

Table 11: Total Indirect Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
EAQ → OP	-0.006	-0.006	0.006	1.023	0.306
EAR → OP	-0.014	-0.012	0.012	1.116	0.264
EAT → OP	-0.016	-0.014	0.014	1.112	0.266

The results show that the total indirect effects of EAQ, EAT, and EAR on OP through Financial Reporting Credibility are all statistically insignificant. Specifically, EAQ → OP has a coefficient of -0.006 and has a sig.value of 0.306, EAR → OP has a coefficient of -0.014 and a sig.value of 0.264, and EAT → OP has a coefficient of -0.016 and a sig. value of 0.266). The t-statistics for all relationships are below the threshold value of 1.96, and p-values are greater than 0.05, confirming the lack of significance. This indicates that Financial Reporting Credibility does not mediate the relationship between external audit attributes and organizational performance. The results reveal that all three paths, EAQ → FRC → OP ($\beta = -0.006$, $p = 0.306$), EAR → FRC → OP ($\beta = -0.014$, $p = 0.264$), and EAT → FRC → OP ($\beta = -0.016$, $p = 0.266$) are

statistically insignificant. Similar to the total indirect effects, the t-statistics are below 1.96 and p-values exceed 0.05. These findings confirm that none of the individual mediation paths through FRC are significant, reinforcing the conclusion that FRC does not play a mediating role in the model. The negative coefficients, although very small, suggest a negligible inverse relationship, but since they are insignificant, they hold no practical or theoretical importance.

Summary of Hypotheses

The results indicate that hypotheses H₁, H₂, and H₃ are supported, showing significant direct relationships between external audit factors and organizational performance. However, H₄, H₅ and H₆ are not supported, suggesting that financial reporting credibility does not mediate these relationships.

Table 12: Hypotheses Summary

	Hypotheses	P-Value	Coefficient	Result
H ₁	There is a significant impact of external audit quality on organizational performance	0.011	0.091	Accepted

H ₂	There is a significant impact of external audit technology on organizational performance.	0.000	0.567	Accepted
H ₃	There is a significant impact of external audit risk on organizational performance.	0.000	0.408	Accepted
H ₄	Financial Reporting Credibility mediates the relationship between external audit quality and organizational performance.	0.306	0.006	Fails to Accept
H ₅	Financial reporting credibility mediates the relationship between external audit technology and organizational performance.	0.266	0.016	Fails to Accept
H ₆	Financial reporting credibility mediates the relationship between external audit risk and organizational performance.	0.264	0.014	Fails to Accept

Discussion

The present study examined the direct and indirect impact of external audit attributes and organizational performance, with financial reporting credibility as a mediating variable.

Hypothesis 1: The results indicate that the quality of external audit positively and significantly influences organizational performance, thus supporting H₁. This outcome aligns with earlier studies, highlighting that quality audits increase transparency, strengthen governance systems, and enhance company performance (DeAngelo 1981; Ziaee 2014). Likewise, research conducted by Sattar et al. (2020) emphasizes that the quality of audits enhances investor trust and results for organizations. Although some studies like Elewa & Haddad, 2019 & Mehran et al., 2022 reported insignificant relationships, the present findings align with the dominant stream of literature supporting a positive association. In the context of Pakistan, where weak auditing practices and internal control challenges persist, high external audit quality plays a significant role in enhancing organizational performance.

Hypothesis 2: The research validates a notable and favorable influence of external audit technology on organizational performance, supporting H₂. This result aligns with previous research, indicating that audit technologies like data analytics and CAATs enhance the efficiency and effectiveness of audits (Nasrah et al., 2023). Empirical evidence by Wassie (2025) also indicates

that technological adoption enhances non-financial performance outcomes. These results support the argument that audit technology contributes to improved organizational performance. No strong contradictory evidence was identified, further strengthening the consistency of this finding with existing literature.

Hypothesis 3: The findings show that external audit risk positively influences organizational performance significantly, supporting H₃. However, this finding contrasts with much of the existing literature, which generally suggests that higher audit risk negatively affects performance due to increased uncertainty and reduced credibility (Saeedi et al., 2025; Wahyuandari et al., 2025). The positive relationship noted in this research might be clarified by the context, where audit risk reflects effective risk identification and management rather than uncertainty. This suggests that proactive audit risk assessment can enhance monitoring mechanisms and improve organizational outcomes, particularly in emerging economies like Pakistan and hence supporting H₄.

Hypotheses 4, 5, & 6: Contrary to expectations, the mediating role of financial reporting credibility between external audit attributes EAQ, EAT, and EAR and organizational performance was found to be insignificant, leading to the rejection of H₄, H₅, and H₆. These findings are not consistent with prior studies, which generally report that financial reporting credibility acts as a key mediating mechanism linking audit attributes with performance outcomes (Healy & Palepu,

2001; Gardi et al., 2023; Saputra et al., 2024). The current literature indicates that the quality of audits and technology increase the financial reporting credibility, consequently enhancing organizational performance.

However, the insignificance of mediation in this study suggests that external audit attributes may influence organizational performance more directly rather than through financial reporting credibility. One possible explanation is that in Pakistan's corporate environment, stakeholders may rely more on the reputation and presence of external auditors rather than solely on the perceived credibility of financial reports. Additionally, weaker regulatory enforcement and varying transparency levels may limit the role of financial reporting credibility as an effective mediating mechanism.

Conclusion, Recommendations and Limitations

This study concludes that external audit attributes specifically audit quality, audit technology, and audit risk serve as fundamental drivers of organizational performance within Pakistan's financial institutions. The acceptance of hypotheses H_1 , H_2 , and H_3 reinforces the idea that robust auditing practices directly enhance transparency, operational efficiency, and financial discipline in banks, insurance companies and micro-finance institutions. By examining real-world failures such as those at United Insurance and the National Bank of Pakistan, the research highlights how proactive external monitoring can help to control internal controls and weaknesses gaps and safeguard institutions against significant reputational and performance of organizations. Surprisingly, the results indicate that financial reporting credibility does not act as a mediating factor, leading to the rejection of hypotheses H_4 , H_5 , and H_6 . This suggests a unique institutional dynamic in Pakistan where stakeholders place higher value on the direct presence and reputation of external auditors than on the reports themselves. Consequently, the research underscores that high-tier audit attributes are strategic assets rather than mere regulatory requirements. It is recommended that policymakers and management prioritize digital

transformation and rigorous risk assessment to bridge the gap between theoretical expectations and practical financial stability across the Pakistan Stock Exchange.

According to the results of the study, the subsequent suggestions are put forth for relevant policymakers and stakeholders to enhance decision-making and improve overall results. Financial institutions must prioritize improving external audit quality by guaranteeing auditor independence, professional skills, and efficient audit committee operations. Moreover, organizations are urged to implement sophisticated audit technologies like data analytics and automated audit tools to enhance efficiency, precision, and fraud detection. Enhancing risk evaluation methods in auditing procedures can improve oversight systems and overall organizational performance.

Regulatory authorities such as the State Bank of Pakistan should develop and enforce stronger audit regulations and governance frameworks to improve transparency and accountability within financial institutions. Policymakers should promote the adoption of audit technologies by providing guidelines, incentives, and training initiatives. Furthermore, enhancing the effectiveness of financial reporting standards and their enforcement can help strengthen stakeholder confidence and improve overall financial system stability.

Future studies should incorporate a more detailed examination of audit constructs by including specific dimensions such as auditor independence, competence, and components of audit risk. Researchers are also encouraged to collect data from multiple stakeholders, including shareholders, customers, and regulators, to obtain a more comprehensive perspective. Enhancing the research by incorporating a more extensive sample size, various financial organizations, and longitudinal study designs would strengthen the findings' generalizability and reliability. Moreover, upcoming studies might investigate additional possible mediators or moderators to gain deeper insights into the connection between external audit attributes and organizational performance. The implementation of these recommendations

can significantly contribute to improving transparency, efficiency, and overall performance of organization across various sectors specifically service sector.

Every empirical investigation has some constraints that can affect the extent, understanding, and wider applicability of its results. In this research, which examines the effect of external audit attributes on OP with the mediating role of FRC, it is important to clearly outline these constraints to ensure a transparent understanding of the results. One of the key limitations of study is related to the conceptual depth of the variables. EAT has been examined in a general context without a specific focus on the use of auditing software or advanced digital tools during the audit process. Similarly, external audit quality has been analyzed without incorporating its detailed determinants such as auditor independence, professional competence, industry expertise, features of audit firms. In case of EAR, its core components which includes IR, CR and DR have not been individually assessed and considered. This broader treatment of constructs may limit a more detailed understanding of how each underlying factor contributes to organizational performance.

Another limitation is related to where the data comes from and who is included. While financial institutions have many stakeholders like shareholders, customers, employees, suppliers, regulators, and others, the data used in this study was only collected from employees. The research is specifically based on employees' perceptions regarding external audit practices, meaning that the viewpoints of other key stakeholders have not been included. This limited viewpoint may reduce the overall depth of the findings, since various stakeholders can have different expectations and assessments of audit effectiveness and organizational performance.

The selection of financial institutions also presents a limitation. The study does not cover the entire financial sector; rather data has been gathered only from conventional banks, Islamic banks, microfinance institutions, and insurance companies. Some other kinds of financial companies weren't included in the study, which

might limit how widely the findings can be applied throughout the entire financial sector. In addition, practical constraints have also influenced the research process. Limited time availability reduced the period for data collection, while financial constraints restricted the ability to reach a larger and more geographically diverse sample. Moreover, the current international and economic conditions in Pakistan created difficulties in accessing organizations and respondents, which further affected participation levels. Due to these combined factors, the study relies on a comparatively small sample, which can restrict how far the results can be applied to a wider population.

Another limitation comes from how the research was set up. The study uses data collected at one specific time, which means it can't show how things change over time. This makes it harder to know for sure if one thing causes another. Also, since the information comes from people's own reports, there's a chance they might not tell the truth or give accurate information about what really happens in their organizations. In short, even though there are some limits, the study still gives useful insights into how features of external audits relate to how well an organization does. But when looking at the results, these limits should be kept in mind. Future research could improve this by looking at more detailed factors related to audits, including views from different groups like customers, workers, owners, suppliers, and government regulators. It could also cover more organizations, get more responses, and use studies that follow the same groups over time to get better and more widely applicable results.

Ethical Consideration

Ethical principles are important for keeping research trustworthy, clear, and honest. In this study, all the ethical rules were followed closely during collection of data. Everyone took part on their own choice, and before they filled out the form, they were clearly informed what the study was about, making sure they understood and agreed to take part. The confidentiality and anonymity of participants were carefully protected, as no personal or organizational identifiers were

collected or disclosed, and the data were used only for academic purposes. Furthermore, the people who took part were not treated in any way that could hurt them, make them feel pressured, or force them to take part. They were allowed to leave the study at any time without facing any problems or penalties. This research also upholds honesty along with transparency in reporting, since no data manipulation or fabrication was conducted, and all findings, including insignificant results, were presented truthfully. Additionally, proper acknowledgment of all sources was ensured to avoid plagiarism and maintain academic integrity. Overall, these ethical practices were implemented to safeguard participants' rights and to improve the credibility and trustworthiness of the research outcomes.

Acknowledgment

First and foremost, we express our sincere gratitude to Almighty Allah, the Sustainer of all, whose blessings and guidance made the completion of this project possible. Without His will, nothing can be achieved. We would like to extend our heartfelt appreciation to our respected Supervisor Dr. Asad Ali Mughal at Bahria University for providing continuous support, valuable insights, and constructive guidance throughout this project. His mentorship played a vital role in shaping the direction and quality of our work.

We are also deeply thankful to our Project Coordinator, Dean, and Head of Department for giving us the opportunity to conduct research on the topic, "From External Audit Attributes to Organizational Performance; The Mediating Role of Financial Reporting Credibility in Financial Institutions of Pakistan." This opportunity enabled us to enhance our research skills and gain practical exposure, which will be highly beneficial for our professional careers.

Furthermore, we acknowledge the contributions of all individuals who directly or indirectly assisted us in completing this report. We extend our sincere thanks to our parents for their unwavering support, encouragement, and motivation throughout this journey. Their constant belief in

us helped us successfully complete this project within the given timeframe.

We are truly thankful to everyone who contributed, in any capacity, to the successful completion of this report.

REFERENCES

- Abdelwahed, A. S., Abu-Musa, A. A., Moubarak, H., & Badawy, H. A. (2024). The use of big data and analytics in external auditing: Does audit firm size matter? Evidence from a developing country. *South African Journal of Accounting Research*, 38(2), 113–145.
- Adurayemi, A. C., Tunde, O. A., & Ade, A. M. (2025). Internal auditing and organisational performance in Nigeria. *International Journal of Sustainability in Research*, 3(3), 211–216.
- Agwupuye, R. (2023). The effects of computer assisted audit techniques (CAATs) on the performance of audit work. *SSRN Electronic Journal*.
- Al Ani, M. K., & Mohammed, Z. O. (2015). Auditor quality and firm performance: Omani experience. *European Journal of Economics, Finance and Administrative Sciences*, 74(1), 13–23.
- Al-Ateeq, B. A., Sawan, N., Al-Hajaya, K., Altarawneh, M., & Al-Makhadmeh, A. (2022). Big data analytics in auditing and the consequences for audit quality: A study using the technology acceptance model (TAM). *Corporate Governance and Organizational Behavior Review*, 6(1), 64–78.
- Al-Haddad, S., Sharabati, A. A. A., Nasereddin, A. Y., El-Hafez, A., & Al-Rawashdeh, R. (2025). The impact of logistical competences on organizational performance in SMEs moderated by competitive advantages in social media campaigns. *Sustainability*, 17(13), 5944.
- Al-Hajri, F. S., & Al-Hajri, S. A. M. (2026). Audit risk assessment and fair financial reporting: Evidence from Muscat Stock Exchange in Oman. *Jurnal Cendekia Keuangan*, 5(1), 30–41.

- Alsmady, A. A. (2022). Quality of financial reporting, external audit, earnings power and companies' performance: The case of Gulf Corporate Council Countries. *Research in Globalization*, 5, 100093.
- Allaham, T., Nassar, A. M., & Reesh, S. A. (2017). Factors affecting the application of business risk audit methodology in Jordanian commercial banks. *International Journal of Business and Social Science*, 8(7), 229-236.
- Albahrun, Y. B. (2025). Do audit quality enhancements improve financial reporting credibility? A systematic literature review. *Jurnal Akuntansi dan Auditing*, 22(2), 233-272.
- Anjani, P. (2023). Enhancing transparency and trust through effective financial statement audits. *Advances in Managerial Auditing Research*, 1(3), 103-113.
- Ardianingsih, A., et al. (2024). *The impact of organizational risk assessment and audit effectiveness on organizational performance*.
- Arshad, M.A.; Satar, R.A.; Hussain, M.; Naseem, M.A. Effect of audit on profitability: A study of cement listed firms, Pakistan. *Glob. J. Manag. Bus. Res.* 2011, 11, 9.
- Atta, A. A. B., Baniata, H. M., Othman, O. H., Ali, B. J., Abughaush, S. W., Aljundi, N. A., & Ahmad, A. Y. B. (2024). The impact of computer assisted auditing techniques in the audit process: An assessment of performance and effort expectancy. *International Journal of Data & Network Science*, 8(2).
- Ayoor, I., Ivungu, J. A., Anande, K. G., & Ogirah, A. U. (2019). Effect of Audit Quality on Firm Performance: A Review of Literature. *International Journal of Advanced Academic Research | Social and Management Sciences*, 5(6), 2488-9849.
- Babalola, F. I., Kokogho, E., Odio, P. E., Adeyanju, M. O., & Sikhakhane-Nwokediegwu, Z. (2025). Audit committees and financial reporting quality: A conceptual analysis of governance structures and their impact on transparency. *International Journal of Management and Research*, 4(1), 89-100.
- Babbie, E. (2020). *The practice of social research* (15th ed.). Cengage Learning.
- Beatty, R. P. (1989). Auditor reputation and the pricing of initial public offerings. *The Accounting Review*, 64, 693-709.
- Beest, F. V., Braam, G. J. M., & Boelens, S. (2009). Quality of financial reporting: Measuring qualitative characteristics.
- Bozic, V. (2023). Measuring organizational performance.
- Bingham, A. J., & Witkowsky, P. (2021). Deductive and inductive approaches to qualitative data analysis. *Analyzing and interpreting qualitative data: After the interview*, 1, 133-146.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Celestin, M. (2015). External vs. internal audits: Which approach is more effective in detecting financial misstatements, preventing fraud, and enhancing transparency. *Brainae Journal of Business, Sciences and Technology*, 1(5), 562-572.
- Claes Fornell, & David F. Larcker (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Cohen, J., Krishnamoorthy, G., & Wright, A. (2017). Enterprise risk management and the financial reporting process. *Contemporary Accounting Research*, 34(2), 1178-1209.
- DeAngelo, L. E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183-199.

- Deshmukh, A. A. (2025). Indian knowledge systems (IKS) and service sector development in India. *The International Journal of Commerce Management and Business Law in International Research*, 2(5), 96–103.
- Ditkaew, K., & Suttipun, M. (2023). The impact of audit data analytics on audit quality. *Asian Journal of Accounting Research*, 8(3), 269–278.
- Djakasaputra, A., & Nawawi, M. T. (2024). The Role of Social Media in Building Trust, Creativity, and Satisfaction for Millennial Entrepreneurs. *International Journal of Management Science and Application*, 3(2), 98–109.
- Dulacha G. Barako, Phil Hancock, & H. Y. Izan. (2006). Factors influencing voluntary corporate disclosure by Kenyan companies. *Corporate Governance: An International Review*, 14(2), 107–125.
- Ebuka Emmanuel Ajaegbu; Simon-Jude Mmayie (2025) Resolving Principal Agent Conflicts: Revisiting Agency Theory Through the Lens of Internal Audit. *International Journal of Innovative Science and Research Technology*, 10(10), 1050–1059.
- Ebrahim, A. M. A. (2024). *The Relationship between the Assurance Role of the External Auditor about the Corporate Risk Disclosure and Investment Efficiency: An Applied Study* (Doctoral dissertation, Mansoura University).
- Effiok, S. O., & Bassey, B. E. (2015). Information Technology, Audit Evidence and Financial Performance of An Organization. *European Journal of Accounting, Auditing and Finance Research*, 3(7), 64–71.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532–550.
- Elewa, M. M., & El-Haddad, R. (2019). The effect of audit quality on firm performance. *International Journal of Accounting and Financial Reporting*, 9(1), 229–244.
- Elliott, R. K., & Jacobson, P. D. (1987). Audit technology: A heritage and promise. *Journal of Accountancy*.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Eulerich, M., Masli, A., Pickerd, J., & Wood, D. A. (2023). The impact of audit technology on audit task outcomes. *Contemporary Accounting Research*, 40(2), 981–1012.
- Eze, G. (2013). Audit risk assessment and detection of misstatements in annual reports: empirical evidence from Nigeria. *research Journal of Finance and Accounting*.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, 26(2), 327–349.
- Fathi, S., Mohammadin, Z. & Azarbayjani, K. Corporate finance signaling theory: an empirical analysis on the relationship between information asymmetry and the cost of equity capital. *Int J Discl Gov* 22, 629–643 (2025).
- Garefalakis, A., Sitzimis, I., Angelaki, E. Giannopoulos, P., & Kyriakogkonas, P. (2025). Audit quality indicators across jurisdictions. *Sustainability*, 17(21), 9421.
- Gardi, B., Aga, M., & Abdullah, N. N. (2023). Corporate governance and financial reporting quality. *Sustainability*, 15(13), 9869.
- Grakhov, M. V., & Sokolov, A. Y. (2025, May). External Audit Risks in Digital Transformation of Integrated Business Processes. In *International Scientific Conference Digital Future: Science, Education, and Innovative Development of Socio-Economic Systems* (pp. 478– 487). Cham: Springer Nature Switzerland.
- Guterman, A. S. (2023). Organizational performance and effectiveness. *SSRN Electronic Journal*.
- Hair, J. F., Sharma, P. N., Sarstedt, M., Ringle, C. M., & Liengard, B. D. (2024). The shortcomings of equal weights estimation in PLS-SEM. *European Journal of Marketing*, 58(13), 81–122.

- Hazaea, S. A., et al. (2024). *The role of audit practices in enhancing organizational performance and governance*. Humanities and Social Sciences Communications, 11(1).
- Holmes, S. A. T. (2025). *Financial Statement Fraud and Auditors' Perspective on the Effectiveness of the Audit Risk Model and the Use of MIPs in Adequately Assessing Audit Risks* (Doctoral dissertation, National University).
- Ilias, N. F., & Md Zin, N. (2025). Audit quality and sustainability reporting: A conceptual framework for transparent and responsible disclosure. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(8), 1388–1396.
- Iqbal, N., & Shahzad, A. (2025). Linking financial soundness to performance. *Journal of Political Stability Archive*, 3(3), 1570–1588.
- Jan Hendrik Henseler, Christian M. Ringle, & Marko Sarstedt (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Jahangir, R., & Bulut, M. (2026). Developing a sustainable financing channel for nano-entrepreneurs. *Journal of Islamic Accounting and Business Research*.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm. *Journal of Financial Economics*, 3(4), 305–360.
- Joksimović, M., Djurić, Z., & Đekić, I. Auditing Risk in Conditions of Economic Instability: New Approaches to Risk Assessment and Management.
- Kaluwila, M., & Mpundu, M. (2026). Audit quality and earnings management.
- Katamba, A. B., Voon, A. Y. S., Min, H. S., & Seow, H. V. (2017). The impact of information systems on financial audit: an over view of external auditors' preparedness to tackle clients automated environment. *Advanced Science Letters*, 23(11), 10692-10695.
- Khan, M. A., Rafay, A., & Shakeel, M. (2020). *Role of auditing in fraud prevention and organizational effectiveness in Pakistan*. Lahore Journal of Business.
- Le, T. T., Nguyen, T. M. A., & Ngo, T. H. C. (2022). Risk-based approach and quality of independent audit. *European Research on Management and Business Economics*, 28(3), 100196.
- Liang, L., Dai, T., Cui, L., & Song, M. (2025). Digital audit talent's impact on audit digitization. *Scientific Reports*, 15(1), 31222.
- Mahmood, T., Ahmad, S., Ullah, K., & Shil, N. C. (2025). Labor productivity and output convergences in South Asia. *Journal of Economic and Administrative Sciences*.
- Mehron, M., Zubair, F., & Ahmed, W. (2022). Effect of audit quality and CEO remuneration on firm performance. *International Journal of Business and Economic Affairs*, 7(3), 59–77.
- Miettinen, J. (2011). The role of audit quality on the relationship between auditee's agency problems and financial information quality. Paper presented at the Department of Accounting and Finance, University of Vaasa, Finland
- Mohammad Zaid AlOtaibi. (2025). The Impact of Efficient Financial Markets and Corporate Governance Practices on Economic Stability. *International Journal of Social Science and Humanities Research*, 13(2), 104–113.
- Mohd Noor, N. F., Mohd Sanusi, Z., Johari, R. J., Saad Al-Dhubaibi, A. A., Hidayati, A., & Abdul Razak, N. (2022). An examination of the utilization of audit technology in influencing audit job performance. *Asian-Pacific Management Accounting Journal*, 17(1), 283-309.
- Montgomery, D. C., Peck, E. A., & Vining, G. G. (2021). *Introduction to linear regression analysis*. John Wiley & Sons. influencing audit job performance.

- Muhaise, H., Ejiri, A. H., Muwanga-Zake, J. W. F., & Kareyo, M. (2020). The research philosophy dilemma for postgraduate student researchers. *International Journal of Research and Scientific Innovation*, 7(4), 2321-2705.
- Mujalli, H. (2024). *Risk-based auditing and organizational performance: Evidence on risk management effectiveness*. *Journal of Risk and Financial Management*, 17(5), 196.
- Mukhsin, M., & Suryanto, T. (2022). Sustainable supply chain management and company performance. *Sustainability*, 14(2), 818.
- Nasrah, H., Muda, I., & Kesuma, S. A. (2023). Computer assisted audit tools and techniques adoption: A systematic literature review. *International Journal of Social Service and Research*, 3(3), 630-638.
- Nawaz, T., & Khanam, S. (2026). Integrated reporting: A systematic literature review. *Journal of Financial Reporting and Accounting*.
- Navarro, G., & Naranjo, G. (2025). Quality culture, quality management, and organizational performance: A structural model for the manufacturing sector. *Sustainability*, 17(9), 3934.
- Nikolovski, P., Zdravkoski, I., Menkinoski, G. Dičevska, S., & Karadžova, V. (2016). The Concept of Audit Risk. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 27(1), 22-31.
- Nkansa, P., Barr-Pulliam, D., & Walker, K. (2025). Internal audit in enterprise risk management. *Journal of Risk and Financial Management*, 18(12), 707.
- Ndirangu, M. E., Ouma, J. A., & Mugetha, I. A. (2026). Financial management practices and profitability. *Journal of Finance and Accounting*, 10(3), 23-46.
- Obiosa, S. E., Ibanichuka, E.A.L., Oshi, J.E.O., (2025). Audit Risk and Faithful Representation of Financial Reports of Quoted Manufacturing Firms in Nigeria. *MRS Journal of Accounting and Business Management*, 2 (4), 28-37.
- Omonuk, J. B., & Oni, A. A. (2015). Computer assisted audit techniques and audit quality in developing countries: Evidence from Nigeria. *Journal of Internet Banking and Commerce*, 20(3), 1.
- Okpala, K. E. (2012). Audit Committee and Integrity of Financial Statements. *Australian Journal of Business and Management Research* Vol, 2(08), 32-40.
- Permana, G. P. L., & Puspitadewi, M. A. A. (2023). Understanding using of audit software by auditor with unified theory of acceptance and use of technology construct. *Kompartemen: Jurnal Ilmiah Akuntansi*, 142-154.
- Poth, C. N., & Shannon-Baker, P. (2022). *State of the methods: Leveraging design possibilities of qualitatively oriented mixed methods research*. *International Journal of Qualitative Methods*, 21, 1-16.
- Pramukti, A. (2024). Internal audit versus external audit. *Golden Ratio of Auditing Research*, 4(2), 78-88.
- Prawanth, S. and Perera, K.H. (2022). Stakeholders' Perception on Auditors' Role and Its Impact on Audit Expectation Gap: Special Reference to Licensed Commercial Banks in Sri Lanka, South Asian Journal of Finance, 2(1), 68-83.
- Putri, A. Y., & Arum, E. D. P. Systematic Literature Review: The Role of Audit Risk on Audit Quality.
- Rahman, M. M., Meah, M. R., & Chaudhory, N. U. (2019). The impact of audit characteristics on firm performance: an empirical study from an emerging economy. *The Journal of Asian Finance, Economics and Business*, 6(1), 59-69.
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance. *Journal of Management*, 35(3), 718-804.
- Rosli, K., Yeow, P., & Eu-Gene, S. (2013). Adoption of audit technology in audit firms.

- Rustam, S., Rashid, K., Zaman, K. RETRACTED: The Relationship between Audit Committees, Compensation Incentives and Corporate Audit Fees in Pakistan; Elsevier: Amsterdam, The Netherlands, 2013.
- Saeedi, H., Rezazade, J., Sepasi, S., & Asrami, M. A. (2025). The Effect of Corporate Governance Elements on Audit Risk. *Business, Marketing, and Finance Open*, 2(4), 1- 12.
- Salin, A. S. A. P., Ismail, Z., Smith, M., Raman, S. A., Omar, N., & Shamsudin, S. M. (2025). Risk management, internal audit function, and corporate performance. *Risk Governance and Control: Financial Markets & Institutions*, 15(4), 33
- Santoso, B. (2021). The impact of information technology on the audit process. *Golden Ratio of Auditing Research*, 1(1), 11-23.
- Sattar, U., Javeed, S. A., & Latief, R. (2020). Audit quality and firm performance. *Sustainability*, 12(10), 4153.
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2007). *Research methods for business students*. Financial Times/Prentice Hall.
- Sarwar, M. A., & Khattak, A. N. (2024). Aspects and dimensions of organizational performance: A qualitative-exploratory literature review. *Journal of Development and Social Sciences*, 5(3), 587-595.
- Sekaran, U. (2016). *Research methods for business: A skill-building approach*.
- Sheng, D., & Montgomery, H. (2023). Do audits boost firm performance? *Corporate Governance and Organizational Behavior Review*, 7(3), 188-203.
- Silva, A., Jorge, S., Rodrigues, L. L., & Proença, C. (2025). The role of internal and external enforcers in enhancing financial reporting quality. *Journal of Accounting & Organizational Change*.
- Sunday, O., & Osarobo, I. O. G. (2025). Audit Quality Attributes and Financial Reporting Credibility Nexus: Further Evidence from Nigeria. *Journal of Academic Research in Economics*, 17(1).
- Thottoli, M. M., Ahmed, E. R., & Thomas, K. V. (2022). Emerging technology and auditing practice: analysis for future directions. *European Journal of Management Studies*, 27(1), 99-119.
- Tinyase, K. O., Ocansey, E. O., & Asamoah, F. O. (2025). Technology and audit quality. *Journal of Accounting*, 7(2), 30-46.
- Tontiset, N., & Kaiwinit, S. (2018). The Factors Affecting Financial Reporting Reliability: An Empirical Research of Public Listed Companies in Thailand. *Journal of modern accounting and auditing*, 14.
- Wahyuandari, Wenni & Minarni, Eni & Santi, Diyah. (2025). A study on the effect of risk-based auditing on organizational financial performance. *Jurnal Konseling dan Pendidikan*. 13. 398-408. 10.29210/1143500.
- Wassie, F. A., & Lakatos, L. P. (2025). Audit technology as a catalyst for improving non-financial performance in ethiopian audit firms. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(2), 100556.
- Winarningsih, S., & Yadiati, W. (2025). The Impact of Big Data Analytics on Audit Quality in the Digital Era. *JASa (Jurnal Akuntansi, Audit dan Sistem Informasi Akuntansi)*, 9(2), 368-377.
- Xu, Y., Zhao, J., Fang, Q., Wang, H., Wang, D., Zeng, B., & Wang, Y. (2022). Organizational effectiveness evaluation. *ICHSSR Proceedings*.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.

- Zhong, Y. (2024). Audit quality and financial reporting quality. *Advances in Economics and Management Research*, 12(1), 557.
- Ziaee, Morteza. (2014). The Effect of Audit Quality on the Performance of Listed Companies in Tehran Stock Exchange. *International Letters of Social and Humanistic Sciences*.

