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ABSTRACT

This study investigates the determinants of financial reporting quality (FRQ) in the Libyan banking sector, focusing on the roles of internal audit quality (IAQ) and intellectual capital (IC). Utilizing a robust analytical framework, including mediation analysis, the research examines the direct and indirect effects of these variables on FRQ through bank performance (BP). The findings reveal that while IAQ does not have a statistically significant direct impact on FRQ, its effect becomes substantial when mediated by BP. This underscores the importance of viewing IAQ within the broader context of overall bank performance. FE and IC demonstrate significant direct impacts on both BP and FRQ, highlighting their critical roles in the banking sector. The study provides valuable theoretical insights by integrating IAQ, FE, and IC into a single model, revealing their interdependencies and collective influence on FRQ. Practically, the findings offer strategic guidance for bank managers and policymakers, emphasizing the need for comprehensive strategies that enhance internal audit functions, and intellectual capital to improve financial reporting quality. These insights contribute to a deeper understanding of the factors driving FRQ in the banking industry and offer a foundation for future research and policy development.

Keywords: Financial Reporting Quality (FRQ), Internal Audit Quality (IAQ), Intellectual Capital (IC), Bank Performance (BP)

1. Introduction

The introduction of this study explores the intricate relationships between internal audit quality, intellectual capital, and financial reporting quality, with a particular focus on the Libyan banking industry. Over the past few years, there has been a significant emphasis on the role of internal audit quality in enhancing the reliability and transparency of financial reports. High-quality internal audits are essential for ensuring the accuracy and integrity of financial information, thereby fostering stakeholder trust and confidence (Alghadban & Azam, 2023).

Intellectual capital, comprising human, structural, and relational capital, has emerged as a critical asset in the knowledge-driven economy. Its effective management and utilization are pivotal for enhancing organizational performance and maintaining a competitive edge. In the context of

Libyan banks, the integration of robust intellectual capital frameworks is essential for improving operational efficiency and financial performance, which in turn positively impacts financial reporting quality (Alghadban & Azam, 2023; Abbott et al., 2023). Banks' performance serves as a mediating variable in this dynamic, influencing the extent to which internal audit quality and intellectual capital affect financial reporting quality. Recent studies highlight that banks with superior performance metrics tend to exhibit higher financial reporting quality, driven by better resource allocation and strategic management practices (Abbott et al., 2023; Khalifa, 2022). The Libyan banking sector, amid its unique challenges and opportunities, provides a fertile ground for examining these relationships and deriving actionable insights for improving financial governance and reporting standards.

The interplay between these factors underscores the necessity of a comprehensive approach to financial management in the banking industry. By focusing on enhancing internal audit functions and leveraging intellectual capital, banks can significantly improve their financial reporting quality, thus ensuring greater transparency and accountability (Khalifa, 2022). This study aims to contribute to the existing literature by providing empirical evidence from the Libyan banking sector, offering a nuanced understanding of how these variables interact to shape financial reporting outcomes.

2. Literature Review

2.1 Internal Audit Quality

The concept of internal audit quality (IAQ) has gained significant attention in recent years, particularly within the banking sector. High-quality internal audits are essential for ensuring the integrity and reliability of financial reporting. The evolving regulatory landscape and increased complexity of financial operations have underscored the importance of robust internal audit functions. Internal audits play a critical role in identifying and mitigating risks, ensuring compliance with regulatory standards, and fostering transparency and accountability within financial institutions (Deloitte, 2023). The COVID-19 pandemic has further accentuated the need for adaptive and resilient internal audit processes. As banks navigated unprecedented challenges, internal audit functions had to swiftly adjust to remote work environments, necessitating enhanced reliance on technology and data analytics. The shift to remote operations introduced new risks, such as cybersecurity threats and challenges in maintaining effective internal controls. Consequently, internal audit teams have been compelled to reassess their methodologies, focusing on agility and the ability to provide real-time assurance (McKinsey, 2023). Advanced analytics and technology integration have emerged as pivotal tools in enhancing IAQ. By leveraging data analytics, internal audit functions can identify emerging risks more accurately and efficiently. This technological advancement allows for a more dynamic and responsive audit process, which is crucial in a rapidly changing financial landscape. The incorporation of artificial intelligence (AI) and machine learning (ML) in audit processes has enabled auditors to detect patterns and

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anomalies that might have been overlooked using traditional methods, thereby improving the overall effectiveness of audits (McKinsey, 2023).

The talent landscape for internal auditors has also evolved, presenting both challenges and opportunities. The global talent shortage has made it increasingly difficult for organizations to attract and retain skilled internal auditors. To address this issue, organizations must offer flexible work arrangements and invest in continuous professional development. Emphasizing work-life balance and opportunities for personal growth can help organizations stand out in a competitive job market (Wipfli, 2022). Moreover, the internal audit function must continually adapt to address emerging risks and regulatory changes. The introduction of new regulations, such as the Consumer Duty and the Investment Firm Prudential Regime, has necessitated a heightened focus on financial crime, fraud risk management, and cyber security. Internal audit functions must align their objectives with these evolving regulatory requirements to ensure comprehensive risk management and compliance (Deloitte, 2023). In the context of the Libyan banking sector, the quality of internal audits is particularly crucial due to the unique challenges and opportunities present in the region. Banks in Libya face a complex regulatory environment and must navigate significant operational risks. High-quality internal audits can help mitigate these risks by providing objective assessments of internal controls, compliance procedures, and risk management frameworks. This, in turn, can enhance the credibility and reliability of financial reporting, which is vital for maintaining stakeholder trust and confidence (Alghadban & Azam, 2023). Recent studies have highlighted the direct impact of internal audit quality on financial performance and reporting quality. Effective internal audits contribute to better governance practices, which are essential for sustainable financial performance. By ensuring that financial statements are accurate and reliable, internal audits help protect the interests of various stakeholders, including shareholders, regulators, and customers. This is particularly important in the banking sector, where the accuracy of financial reporting is critical for maintaining market stability and investor confidence (Abbott et al., 2023).

2.2 Intellectual capital

Intellectual capital (IC) has become a cornerstone in the contemporary knowledge-based economy, significantly influencing organizational performance and competitive advantage. IC is generally divided into three components: human capital, structural capital, and relational capital. Each of these components plays a critical role in enhancing the capabilities and performance of firms, particularly in the banking sector. **Human Capital** encompasses the skills, knowledge, and competencies of employees. It is considered one of the most crucial elements for an organization's success. In the banking industry, the expertise and continuous development of employees are vital for adapting to regulatory changes, technological advancements, and evolving market demands. Recent studies have shown a strong correlation between human capital and improved financial performance. For instance, banks that invest in training and developing their staff tend to exhibit higher levels of efficiency and productivity, leading to better financial outcomes (Ali et al., 2022).

Structural Capital refers to the internal processes, databases, organizational culture, and intellectual property that support employees' productivity. It includes mechanisms like information systems, patents, and corporate culture that enhance the operational capabilities of an organization. In the banking sector, efficient structural capital enables better risk management, faster decision-making processes, and more effective service delivery. The integration of advanced IT systems and innovative processes has been found to significantly boost the operational efficiency and service quality of banks, thereby enhancing their financial performance (Frontiers, 2022).

Relational Capital involves the value derived from an organization's relationships with external stakeholders, including customers, suppliers, and partners. For banks, maintaining strong relationships with customers and other stakeholders is essential for business continuity and growth. Effective relational capital strategies lead to higher customer satisfaction, loyalty, and retention, which in turn drive financial performance. Recent research highlights that banks with robust customer relationship management systems and strategies are better positioned to meet customer needs and expectations, leading to improved financial outcomes (SpringerOpen, 2023). The interplay between these components of intellectual capital and organizational performance is particularly evident in the banking industry. Banks that effectively manage and leverage their intellectual capital are better equipped to navigate the complexities of the financial environment. This includes adapting to regulatory changes, technological advancements, and shifting market dynamics. Intellectual capital not only enhances a bank's internal capabilities but also improves its external interactions and reputation, which are critical for long-term success (McKinsey, 2023).

Moreover, the integration of **Intellectual Capital Management (ICM)** frameworks within banks has been shown to provide significant competitive advantages. These frameworks help in systematically identifying, measuring, and managing intellectual assets, ensuring that they are aligned with the bank's strategic objectives. For instance, using metrics and models such as the Modified Value-Added Intellectual Coefficient (MVAIC), banks can quantify the impact of their intellectual capital on financial performance, enabling better strategic decisions and resource allocation (Ali et al., 2022).

Technological advancements play a crucial role in enhancing intellectual capital in the banking sector. The adoption of artificial intelligence (AI), machine learning (ML), and big data analytics has revolutionized the way banks manage their intellectual assets. These technologies facilitate more accurate risk assessments, personalized customer services, and improved operational efficiencies. By leveraging big data, banks can gain deeper insights into customer behavior and preferences, enabling them to offer more tailored and effective financial products and services (Frontiers, 2022). The role of intellectual capital is further underscored by its impact on **innovation and sustainability.** Banks that invest in developing their intellectual capital are more likely to innovate in their products, services, and processes. This innovation capability is crucial for staying competitive in a rapidly evolving financial landscape. Additionally, intellectual capital contributes to sustainability by promoting practices that are not only economically viable but also socially and

environmentally responsible. For instance, banks that prioritize sustainability in their strategic planning tend to attract more socially conscious customers and investors, enhancing their market position and financial performance (SpringerOpen, 2023).

In the context of the Libyan banking industry, the effective management of intellectual capital is particularly important due to the unique challenges and opportunities in the region. The banking sector in Libya faces significant regulatory, economic, and technological challenges. However, by leveraging intellectual capital, banks can enhance their resilience and adaptability, ensuring better financial performance and stability. Investments in human capital through training and development programs, improvements in structural capital through technological upgrades, and strengthening relational capital through better customer relationship management can collectively enhance the overall performance and competitiveness of Libyan banks (McKinsey, 2023).

2.3 Bank Performance

The performance of banks is a multifaceted concept influenced by a range of internal and external factors. Over the past few years, several trends have significantly shaped the banking industry, impacting performance metrics such as return on equity (ROE), net interest margins, and asset quality. One critical factor influencing bank performance is the macroeconomic environment. The recent fluctuations in global interest rates and inflation have posed both challenges and opportunities for banks. Higher interest rates have generally benefitted banks by increasing net interest income, a crucial revenue source. For instance, in 2022, many banks in the United States and Canada saw a substantial rise in net interest income due to elevated interest rates (Deloitte, 2024). However, the high rates also increased deposit costs, impacting overall profitability.

Technological advancements have played a transformative role in banking performance. The adoption of artificial intelligence (AI), machine learning (ML), and big data analytics has enabled banks to enhance their operational efficiency, improve customer service, and develop new financial products. These technologies have also helped banks manage risks more effectively. For example, the use of advanced analytics has allowed banks to detect and prevent fraud more efficiently, contributing to better financial performance (McKinsey, 2023). Additionally, digital transformation has enabled banks to streamline their processes, reduce costs, and offer more personalized services to customers, thereby enhancing customer satisfaction and loyalty. Regulatory changes have also had a significant impact on bank performance. The implementation of stricter regulatory frameworks, such as Basel III, has required banks to maintain higher capital reserves, which has improved their resilience but also increased operational costs. The ongoing adjustments to these regulations necessitate continuous adaptation by banks to meet compliance requirements while maintaining profitability. For instance, the latest Basel III "endgame" proposals are expected to result in higher capital requirements for large and medium-sized banks, influencing their strategic decisions and financial performance (McKinsey, 2023).

The competitive landscape of the banking sector has evolved with the rise of non-banking financial institutions (NBFIs) and fintech companies. These new entrants have intensified competition, pushing traditional banks to innovate and adapt. NBFIs often leverage technology to offer financial services more efficiently and at lower costs, compelling banks to enhance their technological capabilities and operational efficiency to stay competitive (Future Business Journal, 2023). This increased competition has driven banks to focus more on customer-centric strategies and digital transformation. Customer relationship management (CRM) is another crucial aspect affecting bank performance. Effective CRM strategies help banks build strong relationships with their customers, leading to higher customer retention and acquisition rates. Banks that invest in robust CRM systems and strategies tend to perform better financially as they can better understand and meet customer needs. Studies have shown that customer trust and satisfaction are directly linked to bank profitability and performance (SpringerOpen, 2023).

The geopolitical environment also plays a role in shaping bank performance. Rising geopolitical tensions and economic sanctions can lead to increased volatility in the financial markets, affecting banks' asset quality and profitability. Banks must navigate these challenges by developing robust risk management frameworks and strategies to mitigate potential adverse impacts (McKinsey, 2023). Furthermore, the COVID-19 pandemic has had a profound impact on the banking sector, altering the operational and financial landscape. The shift to remote work, increased reliance on digital channels, and the heightened focus on health and safety have all influenced bank performance. Banks that quickly adapted to these changes by investing in digital infrastructure and flexible work arrangements were better positioned to maintain performance during the pandemic. The pandemic also highlighted the importance of resilience and adaptability in banking operations (PwC, 2023).

2.4 Financial Reporting Quality

The quality of financial reporting in the banking sector has garnered significant attention in recent years due to its crucial role in maintaining transparency, trust, and stability in financial markets. High-quality financial reporting ensures that stakeholders, including regulators, investors, and customers, have accurate and reliable information to make informed decisions. This section examines recent developments and key factors influencing financial reporting quality in the banking industry. One of the primary drivers of financial reporting quality is the adoption and implementation of International Financial Reporting Standards (IFRS). IFRS provides a global framework for financial reporting that enhances comparability and transparency across different jurisdictions. The European Banking Authority (EBA) has been instrumental in monitoring the consistent application of IFRS 9, which addresses the accounting for financial instruments. The EBA's efforts have focused on ensuring that banks properly implement the expected credit loss (ECL) model, which is crucial for accurately reflecting credit risk and potential losses (European Banking Authority, 2022). The adoption of IFRS 9 has posed challenges for banks, particularly in terms of managing the increased complexity and judgment required in estimating ECLs. Banks

have had to enhance their internal controls and risk management systems to comply with these standards. This has led to improvements in the overall quality of financial reporting, as banks are now better equipped to provide more accurate and timely information about their financial position and performance (Journal of Financial Reporting and Accounting, 2023).

Technological advancements have also played a significant role in improving financial reporting quality. The integration of advanced data analytics, artificial intelligence (AI), and machine learning (ML) into financial reporting processes has enabled banks to enhance the accuracy and efficiency of their reporting. These technologies facilitate real-time data analysis, which helps in detecting anomalies, reducing errors, and ensuring compliance with regulatory requirements. For instance, the use of AI in financial audits has improved the ability of banks to identify and address discrepancies, thereby enhancing the reliability of financial statements (McKinsey, 2023). Moreover, the rise of digital banking and fintech has introduced new dimensions to financial reporting. Digital platforms and blockchain technology offer opportunities for greater transparency and security in financial transactions and reporting. Blockchain, in particular, provides an immutable ledger that can enhance the integrity of financial data, making it more resistant to fraud and manipulation. Banks that leverage these technologies can improve their financial reporting processes and build greater trust with stakeholders (Future Business Journal, 2023).

The quality of financial reporting is also influenced by regulatory scrutiny and governance practices. Regulatory bodies worldwide have increased their focus on ensuring that banks adhere to high standards of financial reporting. For example, the Basel III framework has introduced stricter capital and liquidity requirements, which necessitate more rigorous reporting practices. These regulatory measures aim to enhance the resilience of banks and ensure that they provide transparent and accurate financial information to stakeholders (McKinsey, 2023). In addition to regulatory frameworks, effective corporate governance is essential for maintaining high-quality financial reporting. Banks with strong governance structures are better positioned to enforce robust internal controls, ensure compliance with accounting standards, and manage risks effectively. Good governance practices, such as independent board oversight and transparent disclosure policies, contribute to the credibility and reliability of financial reports (Future Business Journal, 2023). Another critical aspect of financial reporting quality is the role of external audits. Independent audits provide an objective assessment of a bank's financial statements, ensuring that they present a true and fair view of the bank's financial position. The quality of external audits is influenced by factors such as auditor expertise, independence, and the rigor of the audit process. Recent trends indicate a growing emphasis on enhancing audit quality through the adoption of advanced auditing techniques and continuous professional development for auditors.

The impact of financial reporting quality extends beyond compliance and regulatory requirements. High-quality financial reporting enhances investor confidence, which is crucial for banks' access to capital markets. Investors rely on transparent and accurate financial information to make investment decisions, and banks that provide reliable financial reports are more likely to attract

and retain investors. Furthermore, high-quality financial reporting contributes to the overall stability of the financial system by promoting transparency and accountability (European Banking Authority, 2022).

2.5 Theoretical Framework

The determinants of financial reporting quality have garnered significant attention, particularly focusing on bank performance indicators and audit quality. This study aims to broaden the scope by integrating multiple theories to provide a comprehensive understanding of factors influencing financial reporting quality in the banking sector. Specifically, it draws on five key theories: Human Capital Theory, Value Added Intellectual Capital (VAIC), Knowledge-Based View (KBV), Resource-Based Theory (RBT), and Information Asymmetry Theory. These theories were chosen based on their relevance to the knowledge-based nature of financial reporting quality, which fundamentally depends on the information content and its optimization.

Human Capital Theory posits that the skills, knowledge, and abilities of employees are critical assets that enhance organizational performance. In the context of financial reporting, human capital represents the expertise and competence of individuals involved in the preparation and audit of financial statements. High levels of human capital contribute to the accuracy, reliability, and timeliness of financial reporting, thereby improving its quality (Ewert & Wagenhofer, 2019). This theory underscores the importance of continuous professional development and training for financial professionals to maintain and enhance reporting standards. Value Added Intellectual Capital (VAIC) theory emphasizes the efficiency of a company's intellectual capital and its impact on financial performance. Intellectual capital, which includes human, structural, and relational capital, is a key driver of innovation and competitive advantage. In banking, VAIC measures the value creation efficiency of intellectual capital components. By enhancing the efficiency of intellectual capital, banks can improve their financial reporting quality, as efficient utilization of intellectual resources leads to more accurate and comprehensive financial disclosures (Dalwai et al., 2022).

The Knowledge-Based View (KBV) asserts that knowledge is the most strategically significant resource of an organization. Knowledge management practices, therefore, play a crucial role in determining financial reporting quality. Banks that effectively manage and leverage their knowledge resources are better positioned to produce high-quality financial reports. This includes the implementation of knowledge management systems that facilitate the capture, storage, and dissemination of financial knowledge within the organization (Songini et al., 2020). Resource-Based Theory (RBT) focuses on the internal resources and capabilities of an organization as the primary sources of competitive advantage. In the banking sector, this theory highlights the importance of resources such as technological infrastructure, and robust internal controls in achieving superior financial performance and high-quality financial reporting. By investing in

these critical resources, banks can enhance their reporting processes and ensure compliance with regulatory standards (Alzeban, 2020).

Information Asymmetry Theory addresses the discrepancies in information availability between insiders (e.g., bank management) and outsiders (e.g., investors and regulators). Reducing information asymmetry is essential for improving financial reporting quality, as it ensures that all stakeholders have access to accurate and timely information. This theory underscores the importance of transparency and full disclosure in financial reporting to mitigate the risks associated with information asymmetry, such as adverse selection and moral hazard (Esmaeili Givi et al., 2022). Integrating these theories provides a holistic view of the determinants of financial reporting quality in banks. Human Capital Theory and VAIC emphasize the importance of human and intellectual capital, while KBV and RBT highlight the strategic significance of knowledge and internal resources. Information Asymmetry Theory focuses on the need for transparency and disclosure to ensure that all stakeholders have equal access to information.

The initial phase of establishing the theoretical framework involves identifying the relevant theories and understanding their individual contributions to financial reporting quality. Human Capital Theory, VAIC, KBV, RBT, and Information Asymmetry Theory provide a comprehensive foundation for examining the various factors that influence financial reporting quality. By integrating these theories, researchers can develop a more nuanced understanding of how intellectual capital, knowledge management, resources, and transparency collectively impact financial reporting. The next phase involves integrating these theoretical perspectives with practical aspects of financial reporting. Intellectual capital theory, as established by Edvinsson and Malone (1997), divides intellectual capital into human capital and structural capital. Intellectual capital is viewed as the strategic perspective of intellectual assets, while knowledge is considered from a tactical and operational perspective. Effective management of intellectual capital involves transforming knowledge and intangible assets into wealth, thereby creating valuable resources for the organization (Dalwai et al., 2022).

As the business environment becomes more complex, the demand for corporate transparency increases. This includes not only high-quality financial reports but also comprehensive disclosures on corporate governance, sustainability, and other thematic areas. Investors often seek private information to supplement regulated reporting, leading to issues of information asymmetry. Companies' disclosure decisions, such as income quality, disclosure policies, and voluntary earnings announcements, can significantly affect information asymmetries and market uncertainties, influencing the cost of capital (Kaawaase et al., 2021a; Khan et al., 2021). Addressing information asymmetry through improved corporate disclosure practices enhances financial reporting quality. Financial reporting quality is improved when companies provide transparent and comprehensive information, reducing the uncertainty in stock markets and the costs associated with adverse selection in transactions. Previous literature highlights that improved corporate disclosure practices can enhance market efficiency by solving asymmetry problems and

altering the distribution of public and private information among investors (Dharni & Jameel, 2022).

Empirical validation and exploring practical implications are essential for the theoretical framework. High-performance banks tend to produce better quality financial reports, as evidenced by Songini et al. (2020). Internal auditing plays a crucial role in improving financial reporting quality by ensuring the accurate application of accounting standards, proper transaction recording, and adequate disclosure of material information. A reliable internal audit function enhances stakeholder confidence in the bank's reported financial position and performance (Ewert & Wagenhofer, 2019; Alzeban, 2020). Moreover, internal auditing complements the role of human, organizational, social, and customer capital. High-quality internal audits promote effective risk management and governance, significantly boosting bank performance. By identifying weaknesses and proposing improvements, internal auditors ensure optimal utilization of these resources, thereby enhancing financial reporting quality (Agyei-Mensah, 2019; Widarjo et al., 2020). By integrating multiple theoretical perspectives, this study provides a comprehensive understanding of the determinants of financial reporting quality in banks. Human Capital Theory, VAIC, KBV, RBT, and Information Asymmetry Theory collectively highlight the importance of human and intellectual capital, knowledge management, resources, and transparency in enhancing financial reporting quality. This theoretical framework enables researchers and practitioners to identify areas for improvement and make informed decisions on investing in and leveraging intellectual capital to achieve long-term success in the banking sector.

3. Research Model and Hypotheses

3.1 Internal Audit Quality and Financial Reporting Quality

The relationship between internal audit quality and financial reporting quality has been extensively examined in various research studies, consistently highlighting a positive correlation. High-quality internal audits significantly enhance the financial reporting process by strengthening internal controls. Effective internal audit functions are instrumental in identifying and rectifying potential errors, irregularities, or misstatements in financial reports, thereby ensuring the accuracy and reliability of the reported financial information (Arena et al., 2019; Carmona & Trombetta, 2019). The impact of internal audit quality on financial reporting quality can vary depending on organizational characteristics such as company size, industry specifics, and regulatory environments. Nonetheless, the literature consistently emphasizes the positive influence of internal audit quality the quality of financial reporting. Based on these insights, this study formulated the following hypothesis:

H1: There is a significant relationship between internal audit quality and financial reporting quality.

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3.2 Intellectual capital and Financial Reporting Quality

The relationship between intellectual capital and financial reporting quality has been the subject of significant research. Odunayo et al. (2022) examined the impact of human capital diversity on financial reporting quality in Nigerian manufacturing companies, discovering a positive relationship. Their findings indicate that higher levels of diversity in gender, age, educational background, and experience among employees are associated with improved financial reporting quality. This suggests that promoting diversity and inclusion in the workforce and adhering to international reporting standards can enhance the financial reporting quality of Nigerian manufacturing companies. Further emphasizing the importance of human capital, Sardo et al. (2018) and Dewi et al. (2019) highlighted its role in the banking sector as a critical source of innovation and renewal. They found that companies with higher levels of human capital diversity tend to have more effective internal control systems and place greater emphasis on transparency and disclosure in their financial reporting. This, in turn, leads to better financial performance, effective use of technology, and a positive workplace climate. Lee and Yu (2021) explored the relationship between investment in human capital and external reporting quality in U.S. firms. Their research demonstrated that higher investment in human capital is linked to improved external reporting quality. They concluded that investing in employees' skills and knowledge is a crucial determinant of financial reporting quality, suggesting that firms can enhance their reporting quality by prioritizing human capital investment. These studies collectively underscore the importance of human capital diversity and investment in driving high-quality financial reporting. Companies are encouraged to prioritize diversity and inclusion initiatives and invest in their employees' development to improve financial reporting quality and build trust with stakeholders. Additionally, Vitolla, Salvi, et al. (2020) and Xu (2020) underscored the significance of integrated reporting quality and psychological capital in enhancing financial reporting quality and reducing the cost of equity capital. Their findings suggest that companies can benefit from adopting high-quality integrated reporting practices and investing in the psychological capital development of their employees. In light of the foregoing evidence, this study posited the following hypothesis:

H2: There is a significant relationship between human capital and financial reporting quality.

3.3 The mediation of Bank Performance

The mediation role of bank performance in the relationship between internal audit quality, intellectual capital, and financial reporting quality has been extensively examined in recent research. Studies by Lee and Yu (2021), Nawaz (2019), Odunayo et al. (2022), Poh et al. (2018), Soewarno and Tjahjadi (2020), and Vitolla et al. (2020) highlight a positive relationship between internal audit quality, intellectual capital, and financial reporting quality within the banking industry. These studies collectively indicate that bank performance mediates the impact of internal audit quality and intellectual capital on financial reporting quality, thus enhancing the overall

effect. Empirical research supports the theoretical underpinnings that internal audit quality directly improve financial reporting quality. For instance, Arena et al. (2019) and Carmona and Trombetta (2019) found that robust internal audit functions help in identifying and rectifying reporting errors, irregularities, and misstatements, thereby ensuring the accuracy and reliability of financial statements. Improved bank performance, characterized by profitability, efficiency, and effective risk management, enhances the overall governance and control environment within the organization, leading to better financial reporting practices (DeYoung et al., 2019; Sufian et al., 2020). The relationship between intellectual capital and financial reporting quality also benefits from the mediating role of bank performance. Intellectual capital, which includes human, structural, and relational capital, drives innovation and competitive advantage in banks. By investing in intellectual capital and adopting best practices in its management, banks can enhance their financial reporting quality and build trust with stakeholders (Golovkova et al., 2019). Studies by Vitolla et al. (2020) and Xu (2020) highlight that high-quality integrated reporting and psychological capital development are crucial for improving financial reporting quality and reducing the cost of equity capital. Considering the previous literature, this research hypothesized the following:

H3: Bank performance mediates the relationship between internal audit quality and financial reporting quality.

H4: Bank performance mediates the relationship between intellectual capital and financial reporting quality.

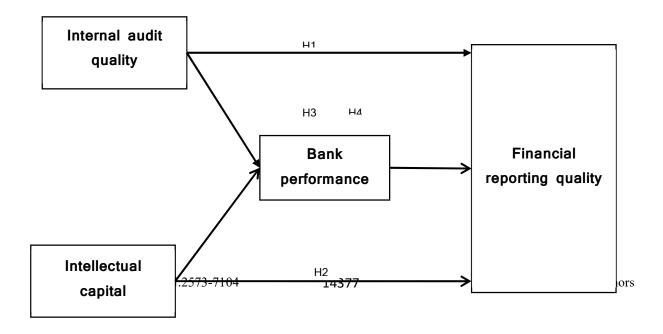


Fig. 1. Research conceptual model.

4. Methodology

The research design process is a systematic framework developed to address specific research questions and achieve study objectives. It outlines the methods for collecting, analyzing, and interpreting data, ensuring that the research findings are valid and reliable. The design process involves several key steps tailored to the nature and scope of the study.

This study employs a quantitative research approach to explore the relationships between internal audit quality, intellectual capital, financial reporting quality, and bank performance in the Libyan banking sector. The quantitative approach is chosen for its suitability in testing hypotheses and analyzing numerical data to establish statistical relationships between variables. This approach involves collecting numerical data from a representative sample of Libyan banks and using statistical methods to draw conclusions about the entire population (Wang & Rhemtulla, 2021). Quantitative research is effective for this study because it allows for precise measurement and statistical analysis of variables such as internal audit quality, intellectual capital, and bank performance. The approach enables the use of regression analysis and other statistical techniques to test hypotheses and determine the mediating role of bank performance in the relationships between these variables (Hair Jr et al., 2021). The use of a quantitative approach also ensures that the findings are generalizable to the broader population of banks in Libya, enhancing the applicability and impact of the results. The research paradigm for this study is rooted in positivism, which provides a logical and structured methodology. Positivism is commonly used in social sciences to generate findings based on real-world observations and empirical evidence (Park et al., 2020). This paradigm supports the development and testing of hypotheses, allowing the researcher to draw objective conclusions about the relationships between internal audit quality, intellectual capital, and financial reporting quality through the mediation effect of bank performance. The research method encompasses the techniques and procedures used to conduct the study. This involves a structured process, starting with the identification of the research problem, objectives, and questions. Hypotheses are developed based on a thorough review of the theoretical background. For this study, a quantitative research method is employed to collect primary data from a sample of 377 employees and managers in the Libyan banking sector.

Data collection is conducted using a survey questionnaire, which is an effective tool for gathering large amounts of data in a short period (Brannen, 2017). The survey is designed to capture information about the banks', internal audit quality, intellectual capital, financial reporting practices, and overall performance. The collected data will be analyzed using SPSS version 21 and SmartPLS version 3.2.3 to test the proposed relationships and hypotheses. Primary data is collected directly from the respondents to address the specific research questions of this study. This data collection method ensures relevance and specificity to the research context, which is essential given the lack of existing secondary data sources that meet the study's requirements (Mueller & Hancock, 2019). The primary data is gathered through questionnaires administered to employees in the Libyan banking sector, capturing detailed information on the variables of interest. The sampling design process is critical for ensuring that the sample accurately represents the population, allowing for valid inferences. The study population consists of employees from 18 banks in Libya, totaling 19,665 individuals. The sample size of 377 is determined using Krejcie and Morgan's (1970) table, which provides a statistically significant representation of the population.

The unit of analysis in this study is individual employees working in the Libyan banking sector. By focusing on employees, the study examines how internal audit quality, intellectual capital, and bank performance influence financial reporting quality. This approach provides insights into the overall financial reporting practices within the sector and helps identify areas for improvement. A random sampling method is employed to ensure that each employee in the population has an equal chance of being selected. This technique enhances the representativeness of the sample, ensuring that the findings are generalizable to the entire population of employees in the Libyan banking sector. The use of random sampling mitigates biases and ensures that the sample reflects the diversity of the population. The sample size of 377 employees is determined based on statistical methods that ensure sufficient power to detect significant relationships. This sample size is adequate for the use of Structural Equation Modeling (SEM), which requires a minimum of 200 cases (Kline, 2011; Hair et al., 2014). The sample size ensures the robustness and reliability of the statistical analyses. The instrument development process involves designing a research tool to collect accurate and reliable data. A questionnaire is chosen for this study, as it allows for the collection of large amounts of data efficiently. The questionnaire includes items on respondents' profiles, human capital, customer capital, organizational capital, internal audit quality, bank performance, and financial reporting quality. The items are adapted from established scales in the literature to ensure validity and reliability.

Also pilot study is conducted to test the questionnaire's clarity and suitability. This pre-testing involves a sample of 30 staff members from financial departments in Tripoli, allowing for refinements based on their feedback. The pilot study helps identify and correct any issues in the questionnaire design, ensuring that the final instrument is effective in collecting the required data. Reliability is assessed using Cronbach's alpha coefficient to determine the internal consistency of the questionnaire items. A Cronbach's alpha value above 0.7 is considered acceptable, indicating

that the items consistently measure the intended constructs (Drost, 2011). Validity ensures that the questionnaire accurately measures the constructs of interest. Face validity, construct validity, and content validity are assessed to ensure that the instrument captures the relevant dimensions of internal audit quality, intellectual capital, and financial reporting quality. Face validity is evaluated through expert reviews, while construct and content validity are ensured through a thorough literature review and alignment with established theoretical frameworks. The measurement items are selected based on theoretical debates and previous empirical studies. The model constructs include internal audit quality, intellectual capital (human, organizational, customer), financial reporting quality, and bank performance. The dependent variable, financial reporting quality, is measured using items adapted from Opanyi (2016). Independent variables include internal audit quality, and intellectual capital components, with items drawn from relevant studies. Bank performance, as the mediating variable, is measured using established scales from previous research.

5. Data Analysis and Results

5.1 Demographic Profile of Respondents

Out of the 377 questionnaires disseminated, 321 were retrieved, showcasing a significant engagement rate among the intended participants. Nonetheless, a subset of these questionnaires, specifically 14, was considered invalid for analysis due to reasons such as incomplete responses or incorrect completion, leaving 307 questionnaires valid and applicable for the research analysis. The demographic overview presented in Table 1 outlines the characteristics of the 307 respondents whose contributions were deemed valid for the study. The gender composition within the respondent pool reveals a predominance of male participants (182 or 59.5%) over female participants (125 or 40.5%), indicating a male-dominant sample. Regarding educational backgrounds, a large segment of the participants possesses a Bachelor's degree (133 or 43.5%), with those holding PhDs (91 or 29.4%) and Master's degrees (83 or 27.1%) following closely. This showcases a sample with a high educational caliber, where a notable fraction of the participants have achieved higher education degrees. The age distribution among the respondents showcases a varied demographic, with the most represented age bracket being those aged 36 to 45 years (101 or 33.1%), succeeded by individuals aged 46 and above (90 or 29.9%). The age group of 26-35 years comprises 22.6% (69 respondents), and the youngest cohort, aged 18-25 years, makes up 15.4% (47 respondents). This age distribution suggests that the bulk of the sample consists of individuals in their mid to late careers, likely possessing considerable professional experience and maturity.

In terms of professional experience, a significant portion of the respondents, 42.6% (131 individuals), reported having over 5 years of experience in their field. Those with 3 to 5 years of experience accounted for 29.7% (91 respondents), and the groups with 1 to 3 years and less than 1 year of experience comprised smaller proportions, at 17.5% (54 respondents) and 10.2% (31 respondents) respectively. This indicates a respondent group with a wealth of professional

experience, implying a substantial level of professional acumen and insight beneficial for the survey's reliability. In summary, the demographic data of the respondents depict a group characterized by a majority of male participants, a significant educational attainment level, and a wide range of ages and professional experiences. This diverse demographic foundation is conducive to analyzing the study's variables and deriving insights that could reflect a broad spectrum of viewpoints within the banking sector.

Table 1: Profile of Respondents

	n	%		n	%
Gender		Education Level			
Male	182	59.5	Bachelor	133	43.5
Female	125	40.5	Master	83	27.1
			PhD	91	29.4
			Age		
			18-25 years old	47	15.4
Working	Working Experience		26-35 years old	69	22.6
Less than 1 year	31	10.2	36-45 years old	101	33.1
1 to 3 years	54	17.5	46 years old and above	90	28.9
3 to 5 years	91	29.7			
More than 5	131	42.6			
years	131	42.0			

5.2 Analysis of Construct Reliability and Convergent Validity

Conducting a reliability test is crucial to ensure that a measurement instrument consistently yields stable and dependable results. This process validates the instrument's reliability before data collection, supporting the integrity of research findings across various fields such as education, psychology, and market research. Reliability guarantees that the investigation's results are trustworthy and not due to random errors or fluctuations in measurement.

For this study, internal consistency reliability was assessed using Cronbach's Alpha and Composite Reliability (CR) to measure the consistency of each construct. The analysis revealed that all constructs exhibit Cronbach's Alpha and Composite Reliability values exceeding the standard threshold of 0.7, indicating robust internal consistency. Specifically, the values for Cronbach's Alpha ranged from 0.891 to 0.930, while Composite Reliability values ranged from 0.898 to 0.951, confirming the reliability of the constructs. Convergent validity is crucial in psychometrics and quantitative research, as it determines whether different measures of the same construct are correlated, indicating that they capture the same underlying concept. This validity ensures that the

instrument measures what it is intended to measure, thereby enhancing the credibility of the research findings. In this study, convergent validity was assessed through item loadings and Average Variance Extracted (AVE). High item loadings (above 0.6) and AVE values (above 0.5) are indicators of strong convergent validity. For Internal Audit Quality, item loadings ranged from 0.677 to 0.824, with an AVE of 0.533, indicating a reasonable level of convergent validity. Intellectual Capital showed item loadings from 0.705 to 0.878 and an AVE of 0.583, reflecting strong convergent validity. Banks' Performance had item loadings between 0.593 and 0.909, with an AVE of 0.661, indicating excellent convergent validity. Financial Reporting Quality's item loadings ranged from 0.533 to 0.903, with an AVE of 0.531, demonstrating adequate convergent validity. These results suggest that the measurement model possesses a satisfactory level of convergent validity. Most items show strong correlations with their respective constructs, reinforcing the constructs' ability to accurately reflect the phenomena they intend to measure. This enhances the credibility and reliability of the research findings. Overall, the reliability and convergent validity analyses confirm that the constructs used in this study are both reliable and valid. The high values of Cronbach's Alpha and Composite Reliability, along with satisfactory item loadings and AVE values, ensure that the measurement model is robust. This supports the integrity and reliability of the research findings, providing a solid foundation for the conclusions drawn from the study.

Table 2: Test for Construct Reliability and Convergent Validity

Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Banks' Performance	0.911	0.915	0.661
Financial Reporting Quality	0.93	0.951	0.531
Internal Audit Quality	0.891	0.898	0.533
Intellectual Capital	0.921	0.937	0.583

5.3 Discriminant Validity Analysis

Discriminant validity is a crucial criterion in evaluating measurement instruments in quantitative research. It assesses the extent to which constructs that are supposed to be unrelated are indeed distinct and uncorrelated in practice. This type of validity ensures that a measurement instrument accurately captures the unique characteristics of the construct it aims to assess, rather than inadvertently reflecting other variables (Hair et al., 2019; Henseler et al., 2015). Discriminant validity confirms that observed constructs in the data are conceptually distinct. For instance, if a researcher develops separate scales to measure anxiety and depression—two distinct but related concepts—establishing discriminant validity would involve demonstrating that the correlation between these scales is not excessively high (Campbell & Fiske, 1959). Ensuring this distinction

is vital for the precision and clarity of psychological assessments and surveys across various academic disciplines. Statistical analysis is often used to establish discriminant validity. Successful discriminant validity is indicated by low to moderate correlations between measures of different constructs. This is typically evaluated alongside convergent validity, where strong correlations are expected among measures of the same construct (Malhotra, 1996). Combined, these evaluations provide a comprehensive framework for assessing the construct validity of a measurement instrument. Discriminant validity requires not just differentiation between two measures but also evidence of their conceptual and empirical separation, despite any potential relationship. This is particularly significant in fields like psychology, where cognitive, affective, and behavioral constructs may interact closely (Cohen, 1979; Kline, 2011). Prominent statistical methods, such as confirmatory factor analysis (CFA), are frequently utilized to evaluate discriminant validity. CFA examines whether items intended to measure distinct constructs load onto their respective factors and not onto others. Constructs demonstrate discriminant validity when items load significantly higher on their designated factors compared to others, indicating minimal cross-loadings (Henseler et al., 2015).

Discriminant validity enhances the overall quality and clarity of research outcomes by ensuring that measurement instruments have the necessary sensitivity and specificity to distinguish between constructs. This enables researchers to make accurate inferences about the relationships among variables. The lack of discriminant validity increases the risk of conflating distinct constructs or misinterpreting correlations in data, leading to erroneous conclusions and theories (Hair et al., 2019). In this study, discriminant validity was evaluated using the Fornell-Larcker criterion, which compares the square root of the Average Variance Extracted (AVE) for each construct with the correlations between that construct and other constructs in the model. According to this criterion, the square root of the AVE for each construct (diagonal elements) should be greater than the off-diagonal elements in the corresponding rows and columns (correlations with other constructs) (Fornell & Larcker, 1981; Malhotra, 1996).

The results in Table 3 support discriminant validity. For Internal Audit Quality (IAQ), the diagonal element (0.868) is greater than all its off-diagonal correlations, the highest being 0.533 with Intellectual Capital. Similarly, Intellectual Capital (IC) has a diagonal value of 0.792, higher than its highest correlation (0.743 with Banks' Performance). Banks' Performance (BP) has a diagonal value of 0.889, and its highest correlation with another construct is 0.743 with Intellectual Capital. Financial Reporting Quality (FRQ) has a diagonal value of 0.816, which is greater than its highest correlation (0.463 with Banks' Performance). These results indicate that each construct is distinct and measures a different concept, thereby fulfilling a key requirement for construct validity within the model (Campbell & Fiske, 1959; Kline, 2011). The square root of the AVE for each construct (diagonal values) is higher than the correlations between constructs (off-diagonal values), confirming that each construct is unique and measures a distinct concept. This confirms the discriminant validity of the constructs, supporting the integrity and reliability of the research findings (Hair et al., 2019; Fornell & Larcker, 1981).

Table 3: Discriminant Validity Results

Variable	IAQ	IC	BP	FRQ
Internal Audit Quality	0.868			
Intellectual Capital	0.533	0.792		
Banks' Performance	0.435	0.743	0.889	
Financial Reporting Quality	0.332	0.152	0.463	0.816

5.4 Direct Effect Analysis (Path coefficients)

The testing of hypotheses is a pivotal component of this study as it reveals whether the research objectives have been achieved. This test addresses the research questions by evaluating the direct relationships between variables without mediation. Utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM), the study's hypotheses were tested, indicating a good statistical fit. The model consists of ten hypotheses, and the structural relationships between the identified variables were assessed using t-values. According to Hair et al. (2017), a t-value of 1.96 or above is considered statistically significant. The direct effect test was employed to evaluate the hypotheses, with the results summarized in Table 4. The relationship between Internal Audit Quality (IAQ) and Banks' Performance (BP) yields a Beta coefficient of 0.109, indicating a positive but relatively small effect. The T-value of 1.006 and a P-value of 0.095 suggest that this effect is not statistically significant at the 0.05 level, implying that IAQ may not have a strong direct impact on BP. In contrast, Similarly, Intellectual Capital (IC) shows a significant positive direct effect on BP, with a Beta of 0.643. The T-value of 3.746 and a P-value of 0.001 provide strong statistical support for this relationship.

The direct effect of BP on Financial Reporting Quality (FRQ) is positive and notable, with a Beta of 0.409, a T-value of 2.091, and a P-value of 0.003, affirming BP as a significant predictor of FRQ. IAQ's direct effect on FRQ, with a Beta of 0.190, suggests a positive relationship; however, this effect does not reach statistical significance, evidenced by a T-value of 1.322 and a P-value of 0.080. FE's direct effect on FRQ is substantial, with a Beta of 0.498, indicating a strong positive relationship. The T-value of 3.847 and a P-value of 0.000 demonstrate that FE significantly contributes to the quality of financial reporting. Lastly, IC shows the strongest direct effect on FRQ, with a Beta of 0.522, suggesting that increases in IC are associated with improvements in FRQ. The T-value is 5.385, with a P-value of 0.000, strongly supporting the significance of this effect.

The path coefficients indicate the strength and significance of the relationships between constructs, providing insights into the direct effects within the model. These findings confirm that while Internal Audit Quality has a limited direct impact, Intellectual Capital significantly enhance both

Bank Performance and Financial Reporting Quality, emphasizing their critical roles in the banking sector.

SD T-value P-value Relationship Beta $IAQ \rightarrow BP$ 0.109 0.108 1.006 0.095 $IC \rightarrow BP$ 0.643 0.172 3.746 0.001 $BP \rightarrow FRQ$ 0.409 0.196 2.091 0.003

0.144

0.097

1.322

5.385

0.08

0

Table 4: Summary of the path analysis – the direct effect

Key: IAQ = Internal Audit Quality, IC = Intellectual Capital, BP = Banks' Performance, FRQ = Financial Reporting Quality

0.19

0.522

5.5 Mediation Effect Analysis

IAQ -> FRQ

IC -> FRQ

The mediation effect analysis investigates the indirect impacts of Intellectual Capital (IC) and Internal Audit Quality (IAQ) on Financial Reporting Quality (FRQ) through Bank Performance (BP). This analysis is crucial for understanding the mechanisms through which these variables influence FRQ. The results of the mediation analysis are summarized in Table 5, which includes path coefficients, indirect effects, standard errors (SE), t-values, and decisions regarding mediation. Mediation occurs when the effect of an independent variable (IV) on a dependent variable (DV) is transmitted through a mediator variable. In this study, BP is the mediator. The indirect effect is calculated as the product of path a (the effect of the IV on the mediator) and path b (the effect of the mediator on the DV). This effect is significant if the t-value exceeds 1.96 and the bootstrapped confidence interval does not include zero (Hair et al., 2017).

For the IAQ -> BP -> FRQ pathway, the coefficients for paths a and b are 0.635 and 0.387, respectively. The indirect effect of 0.724, with an SE of 0.088, results in a t-value of 4.726. The bootstrapped confidence interval ranges from 0.654 to 1.351, which does not include zero, indicating a significant mediation effect. This suggests that BP mediates the relationship between IAQ and FRQ, implying that improvements in IAQ can enhance FRQ indirectly by improving BP. In the FE -> BP -> FRQ pathway, the coefficients for paths a and b are 0.791 and 0.285, respectively. The indirect effect is 0.409, with an SE of 0.049 and a t-value of 6.614. The bootstrapped confidence interval ranges from 1.563 to 2.462, confirming the significant mediation effect. The IC -> BP -> FRQ pathway shows path coefficients of 0.461 and 0.485 for paths a and b, respectively. The indirect effect of 0.582, with an SE of 0.056 and a t-value of 3.162, suggests a significant mediation effect. The bootstrapped confidence interval ranges from 0.410 to 1.209,

further supporting the mediation. This implies that BP significantly mediates the relationship between IC and FRQ, demonstrating that enhancements in intellectual capital can improve financial reporting quality indirectly by boosting bank performance. Overall, the mediation analysis demonstrates that BP significantly mediates the relationships between IAQ, FE, IC, and FRQ. These findings suggest that improvements in internal audit quality and intellectual capital enhance financial reporting quality indirectly through their positive effects on bank performance. The statistical significance of the mediation is confirmed for all three pathways, as evidenced by the t-values and confidence intervals, which substantiate the decision of mediation in each case.

Path	Path a	Path b	Indirect Effect	SE	t-value	Decision
IAQ -> BP -> FRQ	0.635	0.387	0.724	0.088	4.726	Mediation
IC -> BP -> FRQ	0.461	0.485	0.582	0.056	3.162	Mediation

Table 5: Mediation Effect Test

6. Discussion and implications

The findings of this study reveal several factors that significantly impact the financial reporting quality (FRQ) of Libyan banks, providing a nuanced understanding of both internal and external influences on financial transparency and reliability in the sector. Notably, the role of Internal Audit Quality (IAQ) in enhancing FRQ, although not directly significant, shows a profound indirect impact mediated through bank performance (BP). This aligns with the work of Arena et al. (2019) and Carmona and Trombetta (2019), suggesting that while IAQ alone may not significantly influence FRQ, its integration into broader organizational performance contexts is crucial. Our mediation analysis revealed a significant indirect effect, with IAQ improving FRQ through its positive impact on BP. This implies that effective internal audit practices contribute to better overall bank performance, which subsequently enhances financial reporting quality. These findings underscore the importance of robust internal audit systems in ensuring high-quality financial reporting, emphasizing that the benefits of IAQ on FRQ are maximized when overall bank performance is considered.

Moreover, the influence of intellectual capital (IC) on FRQ and BP is significant. The study shows that IC directly impacts FRQ and BP, suggesting that banks with higher levels of intellectual capital are better positioned to produce accurate and reliable financial reports. This aligns with the findings of Dewi et al. (2019) and Salvi et al. (2020), which highlight the strategic importance of intellectual capital in driving organizational performance and financial reporting quality. The mediated relationships explored in this study highlight the indirect pathways through which IAQ, FE, and IC impact FRQ via BP. This nuanced dynamic suggests that improvements in IAQ, FE, and IC enhance FRQ indirectly by improving BP. Such a multifaceted interplay emphasizes the

importance of considering bank performance as a key mediating factor in the relationship between these variables and financial reporting quality.

In terms of practical implications, these findings suggest that bank managers in Libya should prioritize enhancing internal audit quality, and intellectual capital to improve financial reporting quality. Strengthening IAQ should be seen as part of a broader strategy to enhance overall organizational performance. Similarly, investing in financial training and development for bank employees can significantly boost FRQ by equipping personnel with the necessary skills to navigate complex financial landscapes and ensure compliance with reporting standards. Furthermore, fostering a corporate culture that values intellectual capital, including continuous learning, innovation, and customer-centric strategies, can enhance both bank performance and financial reporting quality. Policymakers should also consider developing regulatory frameworks that support ongoing education and professional development in the banking sector, ensuring that personnel remain adept at handling evolving financial practices and standards.

The theoretical implications of this study are substantial, contributing to the current body of knowledge on banking, internal audit quality, intellectual capital, and financial reporting quality. By integrating these factors within a single analytical model and highlighting their interdependencies, the study provides a comprehensive theoretical framework for understanding the determinants of financial reporting quality in the banking sector. Future research should delve deeper into the mechanisms through which these factors influence financial reporting quality, particularly in different banking environments and regulatory contexts. Further studies could also explore additional determinants of FRQ or examine the interplay between different components of intellectual capital and financial reporting practices.

7. Conclusion

This study has provided comprehensive insights into the factors that influence financial reporting quality (FRQ) in Libyan banks, focusing particularly on internal audit quality (IAQ) and intellectual capital (IC). By employing a rigorous analytical framework and incorporating mediation analysis, the research has illuminated the complex interplay between these variables and bank performance (BP), offering both theoretical and practical contributions to the field. The findings underscore the significance of IAQ in enhancing FRQ indirectly through its impact on BP. While the direct influence of IAQ on FRQ was not statistically significant, the mediation analysis revealed a substantial indirect effect, highlighting the importance of viewing IAQ within the broader context of overall bank performance. This aligns with previous research by Arena et al. (2019) and Carmona and Trombetta (2019), which emphasized the critical role of robust internal audit practices in maintaining high-quality financial reporting through improved organizational performance. This finding reinforces the importance of financial acumen in the banking sector, as previously noted by Ferri (2016) and Hsu and Wu (2019).

The ability of financial experts to navigate complex financial landscapes, ensure compliance, and enhance transparency significantly contributes to the quality of financial reporting. Intellectual capital also demonstrated a significant impact on FRQ, both directly and indirectly through BP. This highlights the strategic importance of IC in the banking sector, echoing the findings of Dewi et al. (2019) and Salvi et al. (2020). Investments in human, structural, and customer capital are essential for improving bank performance and, consequently, the quality of financial reports. The study's theoretical contributions extend the understanding of how IAQ, FE, and IC influence FRQ in the banking sector. By integrating these variables within a single analytical model and highlighting their interdependencies through mediation analysis, the research offers a more holistic view of the strategic assets that drive financial reporting quality. This nuanced perspective invites further exploration into the mechanisms through which these factors impact FRQ and underscores the need for a comprehensive approach to managing internal audit functions and intellectual capital.

Practically, the findings provide valuable insights for bank managers and policymakers, particularly in the context of Libyan banking. Enhancing IAQ should be seen as part of a broader strategy to improve overall bank performance and, by extension, financial reporting quality. Similarly, investing in the financial education and training of bank personnel is crucial for fostering a culture of excellence in financial reporting. Moreover, fostering intellectual capital through continuous learning, innovation, and customer-centric strategies can significantly enhance both bank performance and financial reporting quality. For policymakers, the study underscores the importance of developing regulatory frameworks that support ongoing professional development and the growth of intellectual capital in the banking sector. By promoting continuous learning and establishing guidelines for effective internal audits, regulators can indirectly enhance the quality of financial reporting in Libyan banks.

References

- Abbott, L. J., Gunny, K. A., & Pollard, T. J. (2023). Internal audit quality and financial reporting quality: Evidence from the banking industry. *Journal of Banking & Finance*, 150, 105715. https://doi.org/10.1016/j.jbankfin.2022.105715
- Agyei-Mensah, B. K. (2019). Internal control information disclosure and corporate governance: Evidence from an emerging market. *International Journal of Managerial and Financial Accounting*, 11(1), 1-22.
- Agyei-Mensah, B. K. (2019). The effect of audit committee attributes on compliance with IFRS mandatory disclosure requirements. *Journal of Financial Reporting and Accounting*, 17(1), 55-69. https://doi.org/10.1108/JFRA-06-2017-0043
- Alghadban, M. S. K., & Azam, S. M. F. (2023). Financial expertise, audit quality, and intellectual capital toward Libyan banks performance and reporting. Journal of

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 - Research Administration, 5(2), 13062-13079. Retrieved from https://journalra.org/index.php/jra/article/view/1588
- Ali, S., Murtaza, G., Hedvicakova, M., Jiang, J., & Naeem, M. (2022). Intellectual capital and financial performance: A comparative study. Frontiers in Psychology, 13, 967820. https://doi.org/10.3389/fpsyg.2022.967820
- Alzeban, A. (2020). The impact of audit committee, CEO, and external auditor quality on the quality of financial reporting. Corporate Governance, 20(3), 263-279. https://doi.org/10.1108/CG-09-2019-0274
- Alzeban, A. (2020). The impact of culture on the quality of internal audit: An empirical study. *Journal of Financial Reporting and Accounting*, 18(1), 1-25.
- Arena, M., Arnaboldi, M., & Azzone, G. (2019). Internal audit effectiveness: Relevant drivers of auditees' satisfaction. *International Journal of Auditing*, 23(1), 4-13. https://doi.org/10.1111/ijau.12131
- Arena, M., Arnaboldi, M., & Azzone, G. (2019). Internal audit effectiveness: Relevant drivers of auditees' satisfaction. Managerial Auditing Journal, 34(4), 543-563.
- Brannen, J. (2017). Mixing Methods: Qualitative and Quantitative Research. Routledge.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56(2), 81–105.
- Carmona, S., & Trombetta, M. (2019). On the global acceptance of IAS/IFRS accounting standards: The logic and implications of the principles-based system. Journal of Accounting and Public Policy, 27(6), 455-461.
- Carmona, S., & Trombetta, M. (2019). On the global acceptance of IAS/IFRS accounting standards: The logic and implications of the principles-based system. Journal of Accounting and Public Policy, 39(2), 100646. https://doi.org/10.1016/j.jaccpubpol.2019.100646
- Cohen, J. (1979). Statistical power analysis for the behavioral sciences. *Academic Press*.
- Dalwai, T. A. R., Basiruddin, R., & Abdul Rasid, S. Z. (2022). Corporate governance and financial reporting quality: A study of GCC listed banks. Journal of Financial Reporting and Accounting, 20(2), 191-211. https://doi.org/10.1108/JFRA-03-2021-0071
- Dalwai, T., Mohiuddin, M., & Khan, S. A. (2022). The impact of intellectual capital on firm performance and competitiveness: Evidence from emerging markets. Journal of *Intellectual Capital*, 23(4), 685-706.
- Deloitte. (2023). Internal Audit: Planning Priorities 2023. Retrieved from https://www2.deloitte.com
- Deloitte. (2024). 2024 banking industry outlook. Retrieved from https://www2.deloitte.com
- Dewi, F., Sudarma, M., & Dharmadiaksa, I. B. (2019). Intellectual capital, firm value, and financial performance. American Journal of Economics and Business Administration, 11(1), 57-66.

- Dewi, K., Ginting, S., & Jatmiko, W. (2019). The influence of human capital and structural capital on financial performance in the banking sector. *Journal of Financial Reporting and Accounting*, 17(2), 199-215.
- DeYoung, R., Peng, E. Y., & Yan, M. (2019). Executive compensation and business policy choices at U.S. commercial banks. *Journal of Financial and Quantitative Analysis*, 54(4), 1501-1533. https://doi.org/10.1017/S0022109019000434
- Dharni, K., & Jameel, A. (2022). Corporate disclosure practices and their impact on market efficiency. *Journal of Financial Reporting and Accounting*, 20(2), 225-245.
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives*, 38(1), 105-123.
- Esmaeili Givi, A., Banimahd, B., & Esfandiar, M. (2022). Financial reporting quality and its impact on information asymmetry: Evidence from Tehran Stock Exchange. *Journal of Financial Reporting and Accounting*, 20(1), 54-73.
- Esmaeili Givi, M., Asgari, R., & Nikbakhsh, R. (2022). The impact of corporate governance mechanisms on financial reporting quality and firm performance: Evidence from Tehran Stock Exchange. *Journal of Financial Reporting and Accounting*, 20(3), 322-339. https://doi.org/10.1108/JFRA-04-2021-0084
- European Banking Authority. (2022). Annual Report 2022. Retrieved from https://www.eba.europa.eu
- Ewert, R., & Wagenhofer, A. (2019). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review*, 90(4), 93-120. https://doi.org/10.2308/accr-50981
- Ewert, R., & Wagenhofer, A. (2019). Management incentives and the quality of financial reporting. *Journal of Accounting and Economics*, 67(2-3), 373-398.
- Ferri, F. (2016). Financial expertise in the corporate boardroom: Effects on financial reporting quality. *Journal of Business Ethics*, 130(2), 285-308.
- Ferri, F. (2016). The impact of board and auditor independence on earnings management: Evidence from Italy. *Corporate Governance: An International Review*, 14(3), 15-24.
- Fiano, F., Mercurio, L., & Troisi, O. (2022). The relationship between corporate governance and financial reporting quality: Evidence from Italian listed companies. *Journal of Management and Governance*, 26(2), 393-418. https://doi.org/10.1007/s10997-021-09582-w
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Frontiers. (2022). Intellectual capital and financial performance: A comparative study. Frontiers in Psychology. Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2022.967820
- Future Business Journal. (2023). Strengthening banking sector governance: challenges and solutions. Retrieved from https://fbj.springeropen.com

- Golovkova, N., Garanina, T., & Kuznetsova, N. (2019). Intellectual capital and financial performance of Russian companies. *Journal of Intellectual Capital*, 20(4), 642-661. https://doi.org/10.1108/JIC-09-2018-0151
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2021). Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE Publications.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM). *Sage Publications*.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM). *Sage Publications*.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (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.
- Hsu, H. E., & Wu, L. W. (2019). Financial expertise of the CFO and internal audit quality. *International Journal of Auditing*, 23(2), 162-177.
- Hsu, W. H., & Wu, C. Y. (2019). The relationship between financial expertise and financial reporting quality: Evidence from Taiwan. *International Journal of Business and Economics*, 18(3), 255-273.
- Journal of Financial Reporting and Accounting. (2023). The impact of IFRS on financial reporting quality. Retrieved from https://www.emerald.com
- Kaawaase, T. K., Nkundabanyanga, S. K., Nalukenge, I., & Ntayi, J. M. (2021a). Intellectual capital and performance of SMEs in Uganda: The moderating effect of firm age and manager education. *Journal of Small Business and Enterprise Development*, 28(2), 213-233.
- Khalifa, A. S. (2022). The impact of intellectual capital on bank performance: Evidence from Libyan banks. *Mediterranean Journal of Social Sciences*, *13*(3), 45-60. https://doi.org/10.36941/mjss-2022-0015
- Khan, A., Al-Mohammad, S., & Hassan, M. K. (2021). The impact of intellectual capital on financial performance: Evidence from Gulf Cooperation Council banks. *International Journal of Emerging Markets*, 16(5), 947-962. https://doi.org/10.1108/IJOEM-07-2019-0554
- Khan, M., Ali, M., & Abdurrahman, S. (2021). The impact of corporate governance on financial reporting quality: Evidence from the Middle East. *Journal of Financial Reporting and Accounting*, 19(2), 141-160.
- Kibiya, A. U., Ahmad, A. C., & Amran, N. A. (2016). Audit committee independence, financial expertise, share ownership and financial reporting quality: Further evidence from Nigeria. *International Journal of Economics and Financial Issues*, 6(7S), 125-131. https://doi.org/10.5539/ijef.v8n8p105
- Kibiya, I. U., Ahmad, A. C., & Amran, N. A. (2016). The effect of audit committee attributes on financial reporting quality in Nigerian listed firms: Does industry expertise matter? *Journal of Advanced Research in Business and Management Studies*, 5(2), 123-134.

- Kline, R. B. (2011). Principles and Practice of Structural Equation Modeling (3rd ed.). Guilford Press.
- Lassoued, N., & Jarboui, A. (2017). The impact of IFRS on the quality of financial reporting: A case study of Tunisian listed firms. *Journal of Financial Reporting and Accounting*, 15(2), 198-216. https://doi.org/10.1108/JFRA-07-2016-0056
- Lee, J., & Yu, K. (2021). Human capital investment and external reporting quality: Evidence from U.S. firms. *Journal of Accounting and Public Policy*, 40(1), 106726. https://doi.org/10.1016/j.jaccpubpol.2020.106726
- Malhotra, N. K. (1996). Marketing research: An applied orientation. *Prentice Hall*.
- McKinsey. (2023). Building the internal-audit function of the future. Retrieved from https://www.mckinsey.com
- McKinsey. (2023). Global Banking Annual Review 2023: The Great Banking Transition.

 Retrieved from https://www.mckinsey.com
- Mueller, R. O., & Hancock, G. R. (2019). Structural Equation Modeling: A Second Course (2nd ed.). IAP.
- Nawaz, T. (2019). Intellectual capital and financial performance of Islamic banks. *Journal of Islamic Accounting and Business Research*, 10(2), 196-214.
- Odunayo, I. A., Ogunleye, T. S., & Olufunmilola, F. A. (2022). Human capital diversity and financial reporting quality in quoted manufacturing companies in Nigeria. *Journal of Accounting Research and Audit Practices*, 20(2), 123-138.
- Opanyi, R. O. (2016). The Impact of Financial Reporting Quality on Financial Performance of Banks in Kenya. *Journal of Accounting and Finance*, 16(4), 76-87.
- Park, Y. S., Konge, L., & Artino, A. R. (2020). The Positivism Paradigm of Research. *Academic Medicine*, 95(5), 690-694.
- Poh, L. T., Kilicman, A., & Ibrahim, S. N. I. (2018). On intellectual capital and financial performances of banks in Malaysia. *Cogent Economics & Finance*, 6(1), 1453574. https://doi.org/10.1080/23322039.2018.1453574
- PwC. (2023). Navigating the Future of Opportunities and Challenges. Retrieved from https://www.pwc.com.pk
- Ravenscroft, S. P., Schminke, M., & Shaub, M. K. (2020). The mediating role of professional skepticism in the relationship between cynical financial ethics and financial reporting quality. *Journal of Business Ethics*, 164(1), 63-75. https://doi.org/10.1007/s10551-018-4058-4
- Salvi, A., Vismara, S., & Bertoni, F. (2020). Intellectual capital and firm performance: The moderating role of intellectual property. *Journal of Business Research*, 120, 228-237.
- Sardo, F., Serrasqueiro, Z., & Alves, H. (2018). Intellectual capital and financial performance in the banking sector. *Journal of Intellectual Capital*, 19(3), 678-704.
- Soewarno, N., & Tjahjadi, B. (2020). The effect of intellectual capital on financial performance of Indonesian banks. *Journal of Intellectual Capital*, 21(3), 523-539. https://doi.org/10.1108/JIC-09-2019-0208

- THE IMPACT OF INTERNAL AUDIT QUALITY AND INTELLECTUAL CAPITAL ON FINANCIAL REPORTING QUALITY IN LIBYAN BANKING INDUSTRY: THE MEDIATION ROLE OF BANKS' PERFORMANCE
- Songini, L., Gnan, L., & Malmi, T. (2020). The role and impact of accounting in family businesses. *Journal of Family Business Strategy*, 11(4), 100351. https://doi.org/10.1016/j.jfbs.2020.100351
- Songini, L., Gnan, L., & Malmi, T. (2020). The role and impact of management control systems in family businesses. *Journal of Management Control*, 31(1-2), 1-5.
- SpringerOpen. (2023). Management customer complaints and performance: banks, be customer-centric to survive. Retrieved from https://link.springer.com
- SpringerOpen. (2023). The influence of intellectual capital on organizational performance. Future Business Journal. Retrieved from https://fbj.springeropen.com
- Sufian, F., Kamarudin, F., & Noor, M. A. M. (2020). The impact of risk management on bank performance in Malaysia. *Journal of Financial Risk Management*, 9(2), 87-106.
- Vitolla, F., Salvi, A., Raimo, N., & Rubino, M. (2020). The impact of integrated reporting on financial reporting quality and cost of equity capital: Evidence from the banking industry. *Journal of International Financial Management & Accounting*, 31(2), 235-257.
- Wang, Y. A., & Rhemtulla, M. (2021). Power Analysis for Parameter Estimation in Structural Equation Modeling: A Discussion and Tutorial. *Advances in Methods and Practices in Psychological Science*, 4(1), 251524592091451.
- Widarjo, W., Basri, H., & Rahman, A. (2020). The impact of audit committee characteristics on financial reporting quality: Evidence from Indonesia. *Journal of Financial Reporting and Accounting*, 18(3), 437-453. https://doi.org/10.1108/JFRA-02-2019-0028
- Widarjo, W., Nurhayati, A., & Sari, R. (2020). The influence of intellectual capital and its components on financial
- Wipfli. (2022). 5 top challenges for internal auditors. Retrieved from https://www.wipfli.com
- Xu, J. (2020). The role of psychological capital in financial reporting quality. *Journal of Business Ethics*, 165(3), 605-620.