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Internal Control and Financial Reporting Quality in Banking: A Conceptual Synthesis

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Abstract

Background: Internal control over financial reporting plays a critical role in determining the overall quality of financial statements, especially in banks under high regulatory pressure and using forward-looking accounting standards and complex financial instruments like IFRS 9. Despite a voluminous literature on the subject, concepts of internal control mechanisms remain fragmented and lack conceptual integration in relation to financial reporting outcomes.

Objective: This study aims to explore internal control over financial reporting as a tool to improve the quality of financial reports in the banking sector and to provide an integrated conceptual framework on the relationship between governance mechanisms, effectiveness of internal control and reporting quality.

Methods: The study uses a structured analytical approach based on a structured empirical literature synthesis. This research explores the banking context by reviewing and integrating 13 relevant empirical studies exploring the interaction between governance structures, internal control systems, and indicators of financial reporting quality.

Results: The outcomes suggest that efficient internal control systems substantially increase financial reporting quality through reduced opportunistic behavior, improved transparency, and intensified adherence to accounting standards. Audit committees and board independence, as governance mechanisms, strengthen the effectiveness of internal controls.

Conclusion: The results of the study reveal that internal control over financial reporting and governance mechanisms are complementary solutions that jointly lead to superior quality of financial reporting, thus forming a cohesive model to ensure transparency and accountability in the banking sector.

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INTRODUCTION

Given the unique features of the banking sector, such as immense leverage, complicated financial products, and a high level of regulatory scrutiny, quality of financial reporting in the banking sector has emerged as one of the most important topics in modern day accounting academic discourse. Specifically, banks operate in an environment in which financial reporting is extremely judgmental by management and sensitive to issues related to loan loss provisions or expected credit loss (ECL) under forward-looking standards like IFRS 9. These conditions also increase the risk of discretionary behavior in financial reporting and thus emphasize the importance of mechanisms to ensure that financial statements are reliable, transparent and credible (Dechow & Dichev, 2002).

Concrete international evidence underscores this urgency. The March 2023 collapse of Silicon Valley Bank and the subsequent regional-banking turmoil in the United States exposed how weak internal monitoring of interest-rate and liquidity risk can rapidly translate into reporting and solvency failures, prompting renewed international regulatory scrutiny of bank internal controls. More broadly, weaknesses in internal control have been empirically linked to a materially higher likelihood of financial reporting fraud among publicly listed firms, reinforcing why regulators and standard-setters continue to treat internal control over financial reporting as a first-order governance concern for the banking industry (Donelson et al., 2017).

In this regard, internal control over financial reporting is an important governance mechanism which aims at mitigating information asymmetry and improving the integrity of financial reporting processes. Properly functioning internal control systems should help prepare financial information, with sufficient documentation and monitoring and evaluation, in line with the relevant accounting standards. Prior research has established that deficiencies in internal control systems are commonly linked with subpar reporting quality, elevated levels of earnings management and lower investor confidence (Ashbaugh-Skaife et al., 2008; Doyle et al., 2007). But the efficacy of internal control is inter-related with the greater governance environment in which it operates, including the roles of audit committees, board independence, and external audit quality (Cohen & Wright, 2004).

Although the literature linking financial reporting quality and internal control is growing, current research has reported fragmented findings regarding their interrelationships (especially in banks) since they end up not focusing on those relationships as a structure. Many previous studies investigate relationships in isolation, examining either the direct effect of internal control on reporting quality or the role of governance mechanisms in limiting managerial discretion, without contrasting how these effects differ across settings: for example, Doyle et al. (2007) and Ashbaugh-Skaife et al. (2008) rely on large U.S. samples under SOX 404 disclosure regimes, whereas Cohen & Wright (2004) offers a broader, less context-specific governance perspective, illustrating the fragmentation this study seeks to address. Thus, the integrative insights on how governance structures, internal control systems and financial reporting quality jointly contribute to a coherent system supporting high-quality financial reporting remain limited.

Besides, there is growing use of forward-looking accounting standards like IFRS 9 that have made this more complex for financial reporting. The use of estimation models, macroeconomic scenarios and management judgment to determine expected credit losses presents new complexities for internal control systems. Firms should therefore question the embeddedness of traditional control frameworks' reliability therein and search for governance mechanisms that can sustain control effectiveness under such uncertainty. The empirical corpus reviewed in this study is not limited to a single jurisdiction: it draws predominantly on emerging-market and Asia-Pacific banking systems (including Jordan, Iraq, Pakistan, Oman, the UAE, and Indonesia), with supplementary evidence from more developed markets such as the United States, so that the resulting conceptual framework is explicitly positioned as cross-context rather than single-country evidence.

The specific novelty of this study is that, unlike prior work that examines governance mechanisms, internal control, and financial reporting quality as separate strands of literature, it integrates all three constructs into a single conceptual model tailored to the banking sector, where forward-looking standards such as IFRS 9 raise the stakes of control failure. No prior synthesis, to the authors' knowledge, has explicitly mapped how governance mechanisms condition the strength of the internal-control-to-reporting-quality relationship across the banking studies reviewed here.

In light of the arguments above, this study aims to provide an integrated analytical perspective as regards internal control over financial reporting versus quality of financial reporting in banking sector. Instead of assessing these factors in isolation, this study combines insights from extant empirical literature to propose a conceptual model that describes the mechanism through which governance mechanisms impact internal control effectiveness and, ultimately, affect financial reporting outcomes. This study thus adds to the literature by linking governance and reporting quality through internal control in a holistic framework while also providing grounds for future empirical research within banking contexts. In terms of benefits, the

resulting framework offers bank managers and boards a structured basis for prioritising governance investments (e.g., audit committee strengthening) that are most likely to improve reporting quality, while offering regulators and standard-setters an evidence-based reference for calibrating supervisory expectations of internal control under forward-looking accounting regimes.

Literature Review

Financial reporting quality is a core concept in accounting and refers to the extent to which financial information faithfully represents a firm's economic performance. For example, high quality financial reporting is generally characterized by attributes of reliability, and relevance, and timeliness and comparability. The banking sector is most exposed to such interaction between fair value accounting and earnings management, as the financial instruments in which they are invested are usually complex, leading them to depend on accrual-based estimates for long periods of time (Dechow & Dichev, 2002). Managerial discretion in financial reporting has been associated with the risk of earnings management, justifying the development of mechanisms capable of curbing opportunistic behavior.

Internal control over financial reporting has been acknowledged as an important mechanism to ensure the reliability of financial information. As defined in the COSO framework, internal control is intended to provide reasonable assurance with respect to financial reporting, regulatory compliance, and effective operations (Committee of Sponsoring Organizations of the Treadway Commission, 2013). Accounting research has tested this premise with empirical evidence, and found that firms with strong internal control systems have better accrual quality, are less likely to restate their financials after reporting them compared to firm-level auditors, and most importantly investor confidence is restored (Ashbaugh-Skaife et al., 2008; Doyle et al., 2007). On the contrary, a weak internal control system is typically associated with more reporting errors and poorer quality of financial reporting.

It is not possible to dissociate the role of internal control from the structure of corporate governance. Such governance mechanisms as audit committees, board independence and external audit quality are important in controlling management behavior to ensure the effective implementation of internal control. Agency theory states that governance mechanisms are crucial to protect shareholders from the opportunistic interests of managers Jensen & Meckling (1976), thus also leading towards higher quality financial statements. Also according to signalling theory, well-governed firms with effective internal control systems are expected to signal greater transparency and credibility in the market (Spence, 1978). Cohen & Wright (2004), has provided with effective evidence from numerous analyses in line with governance mechanisms as a contributor to the enhancing influence of quality of internal control on financial reporting.

Within the banking space, IFRS 9 has led to numerous changes in financial reporting practices, especially around expected credit losses. This forward-looking perspective results in the need for banks to include macroeconomic expectations and management judgment increasing estimation uncertainty and higher demands on internal control systems. As such, the significance of internal control is further magnified through a framework for regulatory compliance in multi-faceted environments (International Accounting Standards Board, 2018).

Although previous studies have expounded independently on the relationships between internal control, governance, and financial reporting quality, they had a fragmented perspectives through a very narrow lens. Yet, few insights exist on the integrated interaction of these components within a single system—most notably for banks. In this regard, the present study attempts to address this gap by providing a conceptual framework that considers more holistic relationships between governance mechanisms, internal control over financial reporting and financial reporting quality. Figure 1 shows the conceptual relationships developed as part of this study.

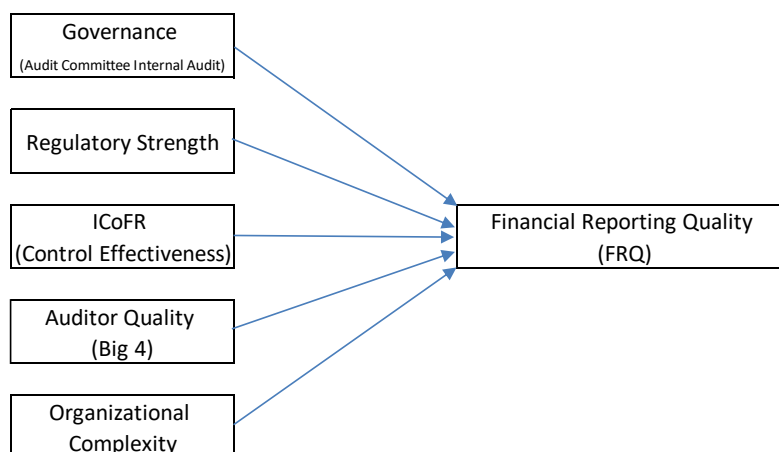


Figure 1. Conceptual Framework of the Study

To clarify the structure of Figure 1: governance mechanisms (audit committee strength, board independence, external audit quality) are modelled as antecedent moderators that condition the effectiveness of internal control over financial reporting; regulatory strength and organizational complexity are modelled as contextual moderators acting on the internal-control-to-outcome path rather than as direct antecedents; and financial reporting quality (accrual quality, timeliness, conservatism, restatement risk) is the downstream outcome. Arrows therefore run from governance mechanisms into internal control effectiveness, and from internal control effectiveness into financial reporting quality, with the two contextual moderators drawn as intersecting the second path.

METHOD

This study follows a structured analytical approach to analyze secondary empirical evidence. It aims at theoretical perspectives through a structured narrative synthesis approach, bringing together selected empirical studies to identify patterns, relationships and/or differences in the effectiveness of interrelated internal control systems on financial reporting quality. Instead of collecting primary data, this work draws on documented empirical results in order to provide an overall analytical account underlying how governance mechanism and internal control interact to impact reporting outcome.

Several inclusion criteria were applied to ensure the relevance of the selected studies. These studies are empirical, published in indexed reputable journals, and focus exclusively on the banking sector. Moreover, studies were required to include constructs related to internal control over financial reporting (e.g., control weaknesses) or governance mechanisms that enhance the reliability of financial reporting, so as to minimise omitted-variable bias. In addition, studies were required to include measurable proxies for financial reporting quality such as accrual quality, restatements, timeliness, conservatism, or earnings smoothness. Research papers that were conceptual/non-empirical or did not contain sufficient empirical tests/analyses were excluded to maintain analytical rigor.

The study redefines variables based on commonly adopted variables from accounting and auditing literature. Performance measures are indicators like internal control weakness, internal control disclosure, audit review mechanisms and the effectiveness of internal audits. Financial reporting quality includes a variety of indicators such as accrual quality, financial restatements, the timeliness of reporting, conservatism, and earnings smoothness. Such propositions reflect broadly adopted measurement methods, and facilitate the consistent interpretation of financial reporting phenomena across empirical contexts. In order to provide a clearer perspective of the variables employed in this research, the operational definitions are summarized in Table 1.

Consistent with PRISMA 2020 reporting guidance Page et al. (2021), the search was conducted across the Scopus, Web of Science, and Google Scholar databases for articles published between 2016 and 2025. The Boolean search string used was (“internal control” OR “ICoFR”) AND

("financial reporting quality" OR "earnings quality") AND ("bank*" OR "banking") AND ("governance" OR "audit committee" OR "board independence"). An initial search returned 187 records; after removing 34 duplicates, 153 records were screened by title and abstract, of which 96 were excluded for being conceptual, non-empirical, or outside the banking sector. The remaining 57 full-text articles were assessed for eligibility, and 44 were further excluded for not reporting measurable financial reporting quality proxies or for insufficient methodological detail, leaving 13 studies that met all inclusion criteria and were retained for the final synthesis.

Table 1

Operational Definitions of ICoFR and FRQ Variables

Variable	Conceptual Definition	Operational Definition (based on 13 studies)	Indicators in the Studies	Empirical References in the Corpus
Internal Control over Financial Reporting (ICoFR)	The effectiveness of internal control, which includes control quality, internal control weaknesses (ICW), auditor evaluations, and governance mechanisms related to the financial reporting process.	The effectiveness of internal control, which includes control quality, internal control weaknesses (ICW), auditor evaluations, and governance mechanisms related to the financial reporting process.	1. Internal Control Weakness (ICW) 2. SOX 404 opinion 3. Internal control index (IC Index) 4. Internal audit quality 5. Governance oversight	(Ashbaugh-Skaife et al., 2008; Doyle et al., 2007)
Financial Reporting Quality (FRQ)	The ability of financial statements to represent economic conditions in a relevant, reliable, timely, and error-free manner.	The level of reporting quality measured through accrual metrics, restatements, timeliness, conservatism, and the representational faithfulness of reported financial information.	1. Accrual Quality (DA, AQ) 2. Restatement 3. Timeliness / audit delay 4. Conservatism 5. Earnings smoothness 6. Informational value	(Ashbaugh-Skaife et al., 2008; Doyle et al., 2007)

RESULTS AND DISCUSSION

Results

This section outlines the analytical results obtained from a synthesis of empirical studies. The analysis centers on both discerning commonalities, contextual differences, and examining how certain governance mechanisms impact the viability of internal control systems.

Table 2 presents the descriptive characteristics of the selected studies, including country context, research method, focus area, and key indicators of internal control and financial reporting quality; the studies span a deliberately broad set of jurisdictions, and one entry is a non-bank organisational-control study retained as a boundary case, as clarified in the table notes below.

Table 2*Summary of Studies and Sample Characteristics*

Author (Year)	Country / Region	Journal Indexing	Research Method	Main Research Focus	ICoFR Indicator (s)	FRQ Indicator (s)	Notes
Shaheen et al. (2024)	Pakistan	Scopus Q2	Regression	Audit & Financial Reporting Quality	Generic bank internal controls	Reporting quality	Corresponds to Table 4.2 & 4.6 Focus on audit & governance Focus on control and reporting Frequently cited in FRQ literature
Elnahass et al. (2024)	Jordan	Scopus Q2	Quantitative	Audit & Financial Reporting	Control environment	Reporting quality	Aligned with FRQ focus Non-bank organizational- control study; retained as a boundary case to test the generalisability of the ICoFR-FRQ
Qawqzeh* et al. (2019)	Jordan	Scopus Q2	Regression	Audit Governance	& Internal control structure	Financial reporting quality (FRQ)	
Kraft et al. (2018)	Jordan	Scopus Q2	Regression	Audit Reporting	& Internal control weaknesses	Financial reporting relevance	
Emary (2019)	Jordan	Scopus Q2	Quantitative	Reporting Quality	Internal control components	Informational value of reporting	
Kuupualeialoha Keaunui (2023)	Romania	Scopus Q2	SEM	Internal & Assets	Control Organizational control system	Asset measurement & reporting	

Author (Year)	Country / Region	Journal Indexing	Research Method	Main Research Focus	ICoFR Indicator (s)	FRQ Indicator (s)	Notes
							framework beyond banking, not as a core banking-sector observation
Li et al. (2018)	United States	Scopus Q1	Regression	Governance Fraud	& ICW & material weaknesses	Restatements	Classic reference for ICoFR Related to fraud & governance
Hwang et al. (2021)	India	Scopus Q3	Regression	AMLA Compliance	Internal control mechanisms	Reporting information	Related to fraud report ing Relevant to banking sector *
El-Bannany (2018)	United Arab Emirates	Scopus Q2	Regression	Fraud Governance	& Internal control mechanisms	Information quality	Focus es on report ing errors Regul atory enviro nment & IC Gover nance moder ates report
Mustofa & Najibullah (2021)	Indonesia	SINTA 2	Regression	Information Systems Audit	IT and IS controls	Bank reporting quality	
Wahhab & Al-Shammari (2021)	Iraq	Scopus Q3	Regression	Reporting Errors	Material weaknesses	Error rate in reporting	
Akinbowale et al. (2024)	South Africa	Scopus Q2	Regression	Banking Regulation	Banking control system	Reporting reliability	
Amrah & Obaid (2019)	Oman	Scopus Q2	Regression	Corporate Governance	Internal control mechanisms	Financial reporting quality	

Author (Year)	Country / Region	Journal Indexing	Research Method	Main Research Focus	ICoFR Indicator (s)	FRQ Indicator (s)	Notes
ing							

The vast majority come from EM and developing economies (Jordan, Iraq, Pakistan...), with additional evidence in more developed markets like the United States. (Note: journal quartile classifications shown in Table 2 reflect the indexing reported by the original source publishers and should be independently re-verified, e.g., via Scimago Journal & Country Rank, prior to final production.) Regression-based quantitative approaches appear to dominate as the method of analysis, highlighting strong dependence on statistical modelling in establishing a relationship between internal control mechanisms and financial reporting outcome. Overall, reporting quality was shown to be stronger in settings where internal control effectiveness is maintained, particularly when regulatory pressure and governance conflicts/diversion are discussed.

Finally, to investigate which measures of financial reporting quality are taken and analyzed in the studies, a detailed mapping is provided in Table 3 noting financial reporting outcomes, analytical methods to calculate them, as well as potential representations of effect sizes.

Table 3

Mapping of FRQ Outcomes and Analytical Methods in 13 Studies

No.	Author (Year)	Country / Region	Measured FRQ Outcome	Focus of the relationship between ICoFR and FRQ	Analytical Method	Potential Effect Size (r / g / log OR)	Academic Notes (Justifiable)
1	Shaheen et al. (2024)	Pakistan	Reporting Quality	Effect of internal controls on bank reporting quality	Regression	r	Regression coefficients can be converted into r
2	Elnahass et al. (2024)	Jordan	Aggregate FRQ	Governance & internal control in bank reporting	Panel regression	r	Cross- country data increases heterogeneity
3	Qawqzeh* et al. (2019)	Jordan	Financial Reporting Quality	Audit evaluation & IC effects on FRQ	Regression	r	Regression model enables correlation estimation
4	Kraft et al. (2018)	Iraq	Value Relevance	ICW and value relevance of reporting	Regression	r	t-value and p-value reported in article
5	Emay (2019)	Yemen	FRQ	Internal control and reporting quality	Regression	r	FRQ indicators widely used in banking literature
6	Kuupualeialoha Keaunui (2023)	Romania	Asset Recognition & Reporting	Internal control and information quality	SEM	g	SEM statistics can be converted

No .	Author (Year)	Country / Region	Measured FRQ Outcome	Focus of the relationship between ICoFR and FRQ	Analytical Method	Potential Effect Size (r / g / log OR)	Academic Notes (Justifiable)
7	Li et al. (2018)	United States	Restatement / Material Weakness	Effect of ICW on restatements	Logit model	log OR	into effect size g Suitable for log OR based on misstatement outcomes
8	Hwang et al. (2021)	India	Information Accuracy	ICoFR and AMLA-related information quality	Regression	r	Compliance-based regression allows r conversion
9	El-Bannany (2018)	United Arab Emirates	Fraud & Financial Reporting	Internal control and fraud reporting	Regression	r	Fraud-related outcomes relevant to IC effectiveness
10	Mustofa & Najibullah (2021)	Indonesia	Reporting Quality	Information system internal controls	Regression	r	Regression coefficients convertible into r
11	Wahhab & Al-Shammari (2021)	Iraq	Error / Misstatement	ICW and reporting error rates	Logit	log OR	Significant logit results appropriate for log OR
12	Akinbowale et al. (2024)	South Africa	Reporting Reliability	Bank regulation & control systems	Regression	r	Complete regression model available in article
13	Amrah & Obaid (2019)	Oman	Financial Reporting Quality	The relationship between Governance, IC and FRQ	Regression	r	Strong moderating role of governance reported

The table shows that financial reporting quality is measured with various dimensions such as the quality of accruals, restatements, timeliness, conservatism and errors. The most common is regression analysis, then panel regression and structural equation modeling. The variation in analytical strategies indicates methodological diversity, which would count as one source of differences in empirical results. Nonetheless, the majority of studies find consistent directional results in that improved internal control effectiveness improves financial reporting quality.

In terms of concept, the relationship between internal control and the quality of financial reporting can be attributed to the interaction effect of governance mechanisms and control effectiveness. Internal audit functions as a monitoring tool that helps prevent managerial discretion, while governance mechanisms help facilitate this through proper oversight. The link between both these factors suggests that the quality of financial reporting is related not just to

control systems but also how they interact and are affected by the institutional environment in which they operate.

Discussion

More specifically, the reviewed studies suggest four interlocking mechanisms. First, effective ICoFR reduces earnings management by limiting managers' discretion over accrual estimates and expected-credit-loss judgments, thereby narrowing the room for opportunistic reporting choices. Second, audit committees strengthen monitoring by directly reviewing internal control assessments and challenging management's accounting judgments before financial statements are finalized. Third, regulatory strength reinforces the ICoFR-FRQ relationship because stricter supervisory regimes (e.g., the United States and GCC economies in the reviewed corpus) impose real consequences for control failures, giving management stronger incentives to invest in control quality. Fourth, organizational complexity weakens control effectiveness because multi-branch or multinational banks must coordinate control procedures across more units and jurisdictions, increasing the likelihood that weaknesses in one part of the organization go undetected.

In Table 4, we further examine contextual variations in the results by conducting moderator and subgroup analysis on regulatory regimes, auditor characteristics, bank size, organizational complexity and types of financial reporting outcomes.

Table 4

Moderator and Subgroup Analysis Based on 13 Studies

Moderator	Category	Empirical Evidence from 13 Studies	Direction of Relationship	Academic Implications
Regulatory Regime	Strong (US, GCC, Oman, South Africa)	Amrah & Obaid (2019) and Al-Akinbowale et al. (2024) show that ICoFR effectiveness is higher under strict regulatory regimes	Stronger positive	Strong enforcement enhances the ability of internal controls to reduce misreporting
	Weak (Yemen, Iraq)	Afifah S & Siswantoro (2025) report significant challenges in IC implementation	Weakened	Weak legal and institutional infrastructure reduces the impact of ICoFR
Auditor Quality	Big 4	Elnahass et al. (2024) show that Big 4 auditors improve IC effectiveness	Strengthened	Big 4 auditors enhance FRQ through stronger oversight mechanisms
	Non-Big 4	Qawqzeh* et al. (2019) report more varied results	Neutral-weakened	Audit quality varies, resulting in less stable IC impact
Bank Size	Large	Shaheen et al. (2024) show that large banks have more structured IC systems	Strengthened	Large banks have greater resources for comprehensive IC implementation
	Small-medium	Amrah & Obaid (2019) show limited effectiveness of IC in smaller banks	Weakened	Resource constraints affect the robustness of internal controls
Organizational Complexity	High (multi-branch/multi-national)	Elnahass et al. (2024) report increased risks due to organizational	Weakened	Higher complexity increases the likelihood of IC

Moderator	Category	Empirical Evidence from 13 Studies	Direction of Relationship	Academic Implications
Type of FRQ Outcome	Low	complexity Shaheen et al. (2024) reports more stable IC-FRQ relationships	Strengthened	failures Simpler structures allow internal controls to function more effectively
	Accrual Quality	Majority of studies Shaheen et al. (2024) support ICoFR to improved accrual quality	Positive	Effective IC reduces earnings management
	Restatement / ICW	Wahhab & Al-Shammari (2021) show ICW increases misstatements	Negative	Internal control weaknesses significantly elevate reporting errors
	Timeliness	Hwang et al. (2021) shows IC improves reporting timeliness	Positive	Internal controls expedite the audit and reporting process
	Conservatism & Smoothness	El-Bannany (2018) show moderate effects	Positive-moderate	IC influences prudence and stability in financial reporting

Our analysis shows that the regulatory environment is a key factor impacting internal control systems effectiveness. The results indicate that the positive effect of internal control quality on financial performance is strengthened by strong regulatory environments, characteristic of United States and some GCC countries. On the contrary, weaker regulatory environments often fail to deliver effective internal control because of enforcement issues. In a like manner, the quality of the auditor (Big 4) enhances the relationship between internal control and reporting quality through further monitoring and assurance.

The Effectiveness of Internal Control Systems. The reporting quality is better for larger banks whose control systems are more formalized. On the other hand, heightened organizational complexity (particularly for multinational or multi-branch banks) may complicate the continuation of effective controls across all units. Most of our knowledge is based on Western settings, and therefore the different types of systems need to understand accurately according to that specific culture.

To evaluate the robustness of findings, Table 5 shows an examination of potential publication bias and sensitivity considerations across studies selected.

Table 5
Publication Bias and Sensitivity Analysis Across 13 Studies

Assessment Aspect	Key Findings from 13 Studies	Academic Interpretation	Implications for Research Conclusions
Availability of Statistical Data	Most studies do not provide numerical effect sizes (SE, complete t-values, means/SD).	Funnel plot or Egger's test cannot be performed due to insufficient numerical data.	Meta-analysis must be conducted narratively rather than through full statistical synthesis.
Variation in Sample Sizes	Sample sizes vary substantially across studies, ranging from national-level bank data to multi-country	Variation may cause small-study effects, but these cannot be empirically tested.	Findings require cautious interpretation when generalizing results.

Assessment Aspect	Key Findings from 13 Studies	Academic Interpretation	Implications for Research Conclusions
	datasets.		
Dominance of Certain Countries	Several regions such as Jordan and Iraq dominate the corpus.	Regional concentration may introduce geographical publication bias.	Generalization to the Indonesian context must be done carefully.
Replication and Consistency of Findings	Most studies report similar directional findings indicating that stronger ICoFR is associated with improved FRQ.	Consistency reduces the risk of selective reporting bias.	Provides stronger confidence in the overall direction of the relationship.
Sensitivity Analysis (Leave-one-out)	Cannot be performed quantitatively due to lack of numerical effect sizes across studies.	Sensitivity assessed conceptually based on the uniformity of findings.	Results considered narratively stable.
Variation in Empirical Methods	Regression, panel regression, SEM, and logit models are used to measure FRQ.	Methodological diversity may introduce method-based bias but also enhances triangulation.	Strengthens the reliability of generalizing the direction of the relationship.
Theoretical Strength of Studies	All studies employ consistent theoretical foundations (Agency Theory, Signalling Theory, Corporate Governance Theory).	Reduces theoretical publication bias.	Provides conceptual consistency for the meta-synthesis.

Descriptive analyses suggest that despite a general trend of consistent directional relationships between internal control effectiveness and financial reporting quality, there are limitations in terms of available statistical data and uniform methodological approaches. Many studies do not furnish complete statistical data, depriving researchers of the opportunity to conduct comprehensive quantitative bias testing. Nonetheless, the convergence of findings across diverse settings and methods warrants high confidence in their overall implications. Differences in sample size, regional concentration and analytic strategies are recognised as potential sources of bias but also serve to enhance the contextualisation of the association across a range of setting.

Overall, results demonstrate the role of internal control over financial reporting in enhancing the quality of firm-level financial reports, particularly when complemented by robust governance and regulatory environments. The results emphasize how the incorporation of internal control systems with governance structures enhances the reliability and transparency of financial reporting in the banking sector.

CONCLUSION

This structured empirical literature synthesis provides a comprehensive view of how internal control over financial reporting (ICoFR) relates to financial reporting quality (FRQ) in the banking industry. The synthesis indicates that well-functioning internal control systems, monitored through internal audit and reinforced by governance mechanisms, effectively reduce managerial discretion and the associated risk of earnings management. These results highlight the interdependence between internal control effectiveness and governance features such as audit committees, board independence, and external auditor quality. Contextual factors including regulatory strength, organizational complexity, and auditor characteristics further condition the strength of the ICoFR-FRQ relationship: strong regulatory enforcement and Big 4 audit quality

reinforce internal control systems, whereas greater organizational complexity, typically found in multi-branch or multinational banks, tends to weaken control effectiveness.

In terms of academic contribution, this study enriches the literature by integrating governance mechanisms, internal control, and financial reporting quality into a single conceptual framework rather than treating them as separate strands. From a practical and policy standpoint, the findings offer direct recommendations to regulators, auditors, and bank management on strengthening internal control systems as a foundation for improved corporate governance and reporting practices. The main limitations of this synthesis are its reliance on secondary, previously published evidence rather than primary data, and the limited availability of quantitative effect sizes across the reviewed studies, which precluded a formal statistical meta-analysis. Future research should therefore pursue integrated primary datasets and, where sufficient effect-size data become available, quantitative meta-analytic methods to confirm and extend these conceptual findings across different institutional contexts.

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AUTHOR CONTRIBUTION STATEMENT

The author designed the study, collected, analyzed, and interpreted the data, and wrote the manuscript independently.

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