

Compliance Risk Management in Islamic and Conventional Banking: A Systematic Literature Review and Research Agenda

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Abstract

This study systematically reviews the development of compliance risk management in Islamic and conventional banking by synthesizing scholarly evidence published between 2015 and 2025. Using a Systematic Literature Review approach guided by the PRISMA framework, this review analyzes 107 studies collected from Scopus and the Watase database. The analysis applies thematic synthesis, supported by the TCCM and CIMO frameworks, to identify the dominant theories, contexts, characteristics, methodologies, mechanisms, and outcomes discussed in the literature. The findings show that compliance risk management has evolved from a narrow regulatory obligation into a multidimensional governance capability shaped by regulatory pressure, corporate governance, Shariah governance, technological capability, organizational culture, and stakeholder expectations. Four major thematic clusters emerged from the reviewed studies: regulatory compliance and banking risk management, Shariah compliance and Shariah governance, corporate governance and internal control, and digital transformation in compliance practices. The review also finds that existing research is geographically concentrated in Malaysia, Indonesia, South Asia, and GCC countries, reflecting the institutional maturity of Islamic finance and dual banking systems in these regions. Although many studies emphasize the positive role of governance and compliance mechanisms in improving stability, legitimacy, and performance, the evidence also indicates that compliance may generate operational costs and rigidity when implemented only as a formal requirement. Furthermore, digital transformation, including fintech, regtech, artificial intelligence, cybersecurity, and digital monitoring tools, remains an emerging but underdeveloped area. This review contributes by offering an integrative synthesis and proposing future research directions on AI-driven compliance, ESG-Shariah integration, and cross-jurisdictional regulatory harmonization.

Introduction

Compliance risk management has attracted growing scholarly and practical attention in both conventional and Islamic banking, particularly as financial institutions operate within increasingly complex regulatory regimes, heightened stakeholder scrutiny, and volatile global markets. Over the past decade, the literature has consistently underscored that governance quality is not merely a formal requirement but a decisive factor in determining banks' resilience and long-term sustainability. Notably, empirical studies suggest that deficiencies in governance structures tend to exacerbate compliance failures, reputational losses, and systemic fragility, whereas well-designed governance mechanisms contribute to stability and institutional credibility (Mollah & Zaman, 2015; Safiullah & Shamsuddin, 2018; Friday et al., 2022; Batizani, 2026).

In the context of Islamic banking, compliance risk management assumes an even more intricate character. Beyond conventional regulatory obligations, Islamic banks are required to ensure continuous adherence to Shariah principles, thereby expanding both the scope and intensity of

compliance oversight. Prior research has demonstrated that Shariah governance arrangements particularly the effectiveness of Shariah Supervisory Boards and disclosure practices play a critical role in mitigating non-compliance risk and enhancing financial performance. For instance, (Grassa, 2015) and (Abdulrahman et al., 2023) document that stronger Shariah governance frameworks are associated with improved credit ratings and financial outcomes across multiple jurisdictions. However, these findings remain dispersed across contexts and methodologies, limiting their cumulative explanatory power.

Interestingly, recent structural shifts in the banking industry have further complicated the compliance landscape. Digital transformation and fintech adoption have reconfigured how banks identify, monitor, and manage risks (Komandla & Perumalla, 2017; Sunkara, 2024; Alsobai & Aassouli, 2025; Mayienga et al., 2024). While digital capabilities are often associated with enhanced efficiency and more sophisticated risk assessment, they simultaneously introduce novel governance and technological vulnerabilities that traditional compliance frameworks may not fully capture (Odedina, 2023; Udoh, 2024). At the same time, the growing prominence of Environmental, Social, and Governance (ESG) considerations has broadened the meaning of compliance itself, extending it beyond legal conformity toward ethical accountability and sustainability. Although emerging studies suggest that aligning ESG practices with Maqasid al-Shariah can strengthen the social legitimacy of Islamic financial institutions, empirical integration of these dimensions remains limited.

Nevertheless, despite the expanding volume of research, existing review studies reveal several unresolved issues. Most prior literature reviews adopt relatively narrow analytical lenses, often concentrating on financial performance or doctrinal aspects of Shariah compliance, while overlooking the interaction between governance structures, technological change, and institutional context (Mustapha et al., 2020; Yusuf et al., 2024). Moreover, many reviews rely on single-theoretical perspectives and focus on a limited set of countries, which constrains their ability to explain cross-contextual variation and emerging risks. As a result, the literature lacks a comprehensive synthesis capable of capturing the multidimensional and evolving nature of compliance risk management in contemporary banking.

Against this backdrop, this study undertakes a Systematic Literature Review (SLR) to synthesize research on compliance risk management in Islamic and conventional banking through an integrative perspective. The novelty of this review lies in its effort to connect Shariah governance, corporate governance, digital transformation, and ESG practices within a unified analytical framework that spans diverse institutional and geographical contexts. Specifically, this study addresses the following questions: (1) what research trends, theoretical foundations, and methodological approaches dominate the literature on compliance risk management; (2) how governance mechanisms and contextual factors shape compliance outcomes; and (3) what gaps and future research directions emerge from existing studies.

The remainder of this article is structured as follows. The next section outlines the methodology of the SLR. This is followed by a presentation and thematic classification of the main findings. The discussion section develops an integrative conceptual framework and highlights theoretical as well as practical implications. The final section concludes the article and proposes avenues for future research.

Shariah governance represents a distinctive institutional architecture through which Islamic financial institutions seek to ensure consistent adherence to Islamic legal principles (Minhas, 2023; Alam & Miah, 2024; Ayub et al., 2024). Unlike conventional governance models, it incorporates specialized mechanisms most notably Shariah Supervisory Boards (SSBs), Shariah audit processes, and Shariah-specific risk management frameworks which collectively

function to preserve both religious legitimacy and operational credibility (Abdulrahman et al., 2023). Notably, the emergence of Shariah governance was not merely a technical adjustment but a normative response to persistent concerns regarding authenticity and differentiation from conventional finance. Its institutionalization has been strongly influenced by international standard-setters such as the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB), whose guidelines have gradually shaped governance practices across diverse regulatory environments (Grassa, 2015; (Nawaz et al., 2020; Fatmawati et al., 2022; Hassan & Raza Rabbani, 2023).

Over the past two decades, scholarly inquiry has increasingly emphasized the strategic relevance of Shariah governance. A growing body of evidence suggests that robust Shariah oversight is associated with improved financial performance, enhanced stakeholder trust, and reduced exposure to Shariah non-compliance risk (Mollah & Zaman, 2015); (Alam et al., 2021). Methodologically, this literature is far from monolithic. While some studies rely on qualitative approaches such as interviews and in-depth case analyses to unpack internal governance dynamics, others employ panel data techniques and regression-based models to test performance-related hypotheses (Basiruddin & Ahmed, 2019). Interestingly, although empirical findings generally point to a positive association between Shariah compliance and bank stability, they also reveal persistent governance frictions, particularly managerial influence over SSB decisions and constraints on board independence (Haridan et al., 2018); (Alam, 2021)). More recent contributions have extended the analytical scope beyond banking, encompassing takaful, Shariah-compliant crowdfunding, and sustainability-oriented risk management. In this regard, the emerging integration of Environmental, Social, and Governance (ESG) principles with Shariah governance has been widely interpreted as a critical step toward a more holistic and future-oriented Islamic finance paradigm (Boudawara et al., 2023).

The literature on corporate governance, Shariah governance, and risk management in Islamic finance has evolved in parallel with the sector's institutional maturation and regulatory complexity. Early studies in the 2000s tended to focus on foundational governance arrangements and basic compliance mechanisms, with empirical attention largely concentrated on jurisdictions such as Malaysia and the Gulf Cooperation Council (GCC) countries (Mollah & Zaman, 2015; Mohd Zain et al., 2025; Sufyan & Othman, 2025). A notable turning point occurred in 2010 with the introduction of Bank Negara Malaysia's Shariah Governance Framework, which subsequently became a global benchmark for best practices (Haridan et al., 2018). This development signaled a shift in scholarly emphasis from viewing Shariah governance as a symbolic compliance tool toward recognizing its strategic implications for performance and risk control.

From approximately 2015 onward, research trajectories began to reflect broader structural changes in the financial sector. Scholars increasingly examined the implications of digitalization, fintech adoption, and technological disruption for governance and risk management within Islamic finance (Yu & Liu, 2025; Alsaghir, 2023; Nipa et al., 2026). At the same time, governance discourse expanded to incorporate sustainability considerations, as researchers sought to align Shariah governance with ESG principles and Maqasid al-Shariah objectives. This conceptual broadening suggests a gradual reorientation of governance research away from narrow compliance concerns toward long-term value creation and societal impact (Mohd Zain et al., 2024). The diffusion of AAOIFI and IFSB standards during this period further reinforced cross-country convergence in governance practices, although implementation outcomes remain uneven (Wasim & Zafar, 2023). Recent studies increasingly acknowledge this complexity, highlighting the need for adaptive and context-sensitive

governance frameworks capable of responding to global financial uncertainty and technological change (Alajmi & Al-Shammari, 2024; El-Halaby et al., 2023) Much of the governance, risk, and compliance (GRC) literature is anchored in three interrelated theoretical traditions: institutional theory, legitimacy theory, and organizational culture theory. Institutional theory posits that organizations tend to conform to dominant norms and regulatory expectations in order to secure legitimacy and survival within their institutional environments (DiMaggio & Powell, 1983; Alam & Miah, 2024). Empirical research in the financial sector supports this view, demonstrating how coercive, normative, and mimetic pressures shape compliance-oriented structures and routines (Burdon & Sorour, 2018). However, a frequently noted limitation of this perspective is its relatively weak explanatory power with respect to innovation and proactive organizational change.

Legitimacy theory, by contrast, foregrounds the role of societal perceptions and emphasizes how organizations actively manage legitimacy through disclosure, transparency, and regulatory alignment (Suchman, 1995). Within Islamic banking, internal legitimacy particularly that derived from credible and visible SSB oversight has been shown to enhance stakeholder confidence and institutional credibility (Alam, 2021; Iqbal et al., 2025). Nevertheless, measuring legitimacy remains methodologically challenging, as it is inherently subjective and context-dependent.

Organizational culture theory further complements these perspectives by highlighting how shared values and norms influence employee behavior and compliance outcomes (Schein, 2010). Empirical evidence suggests that bureaucratic and goal-oriented cultures tend to support stronger adherence to formal policies, including those related to information security and regulatory compliance (Karlsson et al., 2021; Tabash et al., 2022). However, because organizational culture is deeply embedded and context-specific, its explanatory reach across different institutional settings is necessarily limited. Taken together, these classical theories provide a useful foundation for understanding compliance behavior, yet they appear insufficient for capturing the rapid, technology-driven transformations currently reshaping financial governance.

Contemporary research on Shariah governance increasingly reflects a shift toward more nuanced and integrative methodological designs. Advanced quantitative techniques—such as panel data analysis, structural equation modeling (SEM), and Partial Least Squares SEM (PLS-SEM) are now widely employed to examine complex interdependencies among governance structures, organizational culture, compliance behavior, and performance outcomes. For example, (Alrawhani et al., 2025) demonstrate, using PLS-SEM, that self-efficacy and response efficacy exert a significant influence on compliance with information security policies, whereas perceived vulnerability and response costs appear comparatively less salient.

At the same time, qualitative and mixed-methods approaches have gained renewed prominence. Case-based studies and semi-structured interviews have proven particularly effective in uncovering the informal dynamics of Shariah decision-making, including the subtle ways in which managerial influence may constrain SSB autonomy (Alam et al., 2021). Notably, the growing availability of large textual datasets has also encouraged the adoption of big data and text-mining techniques. (Yu & Liu, 2025), for instance, construct a digital transformation index from annual report disclosures and show that enhanced digitalization improves governance quality and operational efficiency, thereby reducing bank risk. Cross-country analyses further enrich this literature by enabling broader generalization and comparative insight, especially with regard to how board characteristics such as SSB size and gender diversity shape credit ratings and institutional resilience (Mansoor et al., 2020).

Taken together, existing empirical studies underscore the central role of Shariah governance and corporate governance in shaping the performance and risk profiles of Islamic financial institutions. Research consistently suggests that intellectual capital efficiency, board independence, and effective Shariah oversight contribute positively to accounting-based performance and compliance outcomes. However, evidence regarding market-based performance remains mixed, pointing to the possibility that governance mechanisms may operate differently across performance dimensions (Nawaz et al., 2020); (Abdulrahman et al., 2023). Digital transformation has emerged as a complementary governance mechanism, enhancing risk management capabilities through improved data quality, monitoring, and decision-making processes (Yu & Liu, 2025; Alm et al., 2024).

Method

Research Design

This study employed a Systematic Literature Review (SLR) approach to examine the development of compliance risk management research in Islamic and conventional banking. The SLR design was selected because it enables a structured, transparent, and replicable synthesis of existing scholarly evidence across diverse theoretical, methodological, and contextual settings. Given that compliance risk management is an interdisciplinary topic involving banking regulation, Shariah governance, corporate governance, risk management, and financial technology, a systematic review approach was considered appropriate to reduce selection bias and ensure that the reviewed literature was assessed through a clear and consistent procedure.

The review was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. PRISMA was used to organize the review process into four main stages, namely identification, screening, eligibility assessment, and inclusion. The use of PRISMA strengthened the methodological transparency of the study by allowing each decision in the literature selection process to be clearly documented. In this study, PRISMA was not only used as a reporting tool, but also as a procedural framework to ensure that the selection of articles was systematic, traceable, and aligned with the research objectives.

Review Scope and Research Focus

The scope of this review was limited to studies examining compliance risk management and related governance mechanisms within the banking and financial sectors. Particular attention was given to studies discussing compliance risk management, Shariah compliance risk, Shariah governance, corporate governance in banking, banking risk management, compliance culture, and regulatory compliance risk. This scope was established to ensure that the selected studies were directly relevant to the central concern of the review, namely how compliance risk is conceptualized, governed, and managed in Islamic and conventional banking institutions.

The review focused on scholarly publications published between 2015 and 2025. This period was selected because it captures important developments in banking governance, regulatory reform, Islamic finance, digital transformation, fintech, regtech, and sustainability-oriented compliance practices. By limiting the review to this timeframe, the study was able to focus on recent and relevant literature while still providing a sufficiently broad period for identifying research trends and thematic developments.

Data Sources and Search Strategy

The literature search was conducted primarily through the Scopus database. Scopus was selected because of its broad coverage of peer-reviewed journals, strong indexing standards,

and relevance for systematic reviews in business, finance, economics, and governance research. The use of Scopus also helped reduce the risk of including low-quality or predatory publications, as the database applies recognized indexing and journal selection criteria. To improve the comprehensiveness of the search and reduce the possibility of missing relevant studies, an additional search was conducted through the Watase database as a supplementary source.

The search strategy was developed using keywords that reflected the core concepts of the study. These keywords included “compliance risk management,” “Shariah compliance risk,” “Shariah governance,” “compliance culture,” “corporate governance in banking,” “banking risk management,” and “regulatory compliance risk.” These terms were chosen because they represent the main conceptual dimensions of the review and allow the search to capture both Islamic and conventional banking perspectives. The combination of keywords was designed to identify studies that addressed compliance risk directly as well as studies that discussed related governance, regulatory, and institutional mechanisms.



Figure 1. PRISMA Flow Diagram of the Study Selection Process

Identification of Studies

The identification stage produced an initial pool of 657 records. This relatively large number indicates the increasing scholarly attention given to compliance, governance, and risk

management issues in the financial sector. At this stage, all records obtained from the database search were compiled and prepared for refinement. The purpose of this stage was to establish a broad initial dataset before applying more specific exclusion and eligibility criteria.

Before the screening stage, several refinement procedures were conducted. First, 17 duplicate records were removed to avoid repeated analysis of the same study. Second, 168 publications were excluded because they fell outside the predetermined publication period of 2015 to 2025. Third, 9 records were removed because they did not contain abstracts, making it difficult to assess their relevance during the screening process. Fourth, 101 articles were excluded based on journal quality tier considerations. After these refinement steps, 362 records remained for further screening.

Screening Procedure

The screening stage involved a careful assessment of article titles and abstracts. The purpose of this stage was to determine whether the records were conceptually aligned with the objectives of the review. Each title and abstract was examined to identify whether the study addressed compliance risk, governance structures, Shariah compliance, regulatory frameworks, risk management, or related issues within banking and financial institutions. This stage allowed the review to move from a broad search result toward a more focused body of literature.

During the screening process, no articles were excluded on the basis of topical mismatch because the refined records were considered broadly relevant to the subject of compliance and governance in banking or finance. However, full-text access became a major practical limitation. Although attempts were made to retrieve the full text of all screened records, 255 articles could not be obtained due to restricted access, incomplete publication information, or unavailable full-text files. As a result, 107 full-text articles proceeded to the eligibility assessment stage.

Eligibility Criteria

The eligibility stage involved a more detailed examination of the full-text articles. At this stage, each article was assessed based on its relevance, methodological clarity, scholarly contribution, and alignment with the review objectives. The assessment considered whether the study provided meaningful insight into compliance risk management, Shariah compliance risk, corporate governance, regulatory compliance, banking risk management, or institutional governance mechanisms in financial institutions.

The eligibility assessment was necessary to ensure that the final review corpus consisted of studies that were not only relevant in title and abstract, but also sufficiently rigorous and substantive in their full content. Articles were considered eligible when they clearly addressed the themes of the review, were situated within the banking or financial sector, and contributed either empirical evidence, theoretical insight, or conceptual discussion related to compliance risk and governance. After full-text assessment, all 107 articles met the eligibility criteria and were included in the final synthesis.

Inclusion and Final Corpus

The final corpus of the review consisted of 107 studies. These studies formed the empirical and conceptual basis for the analysis. No additional studies were added from sources beyond Scopus and Wase. The final number of included studies reflects a balance between breadth and analytical depth, as the review sought to include a sufficiently wide range of literature while maintaining a clear focus on quality and relevance.

The included studies covered diverse topics related to compliance risk management, including Shariah governance, corporate governance, regulatory compliance, compliance culture, fintech, regtech, ESG integration, and banking risk management. This diversity allowed the review to capture the multidimensional nature of compliance risk management and to compare how the topic has been approached across Islamic and conventional banking contexts.

Data Extraction and Organization

After the final set of studies was determined, relevant information was extracted systematically from each article. The extracted information included publication details, research objectives, theoretical frameworks, geographical context, research methods, banking context, key findings, and major themes. This process was conducted to ensure that the review did not merely summarize studies individually, but organized them in a way that allowed meaningful comparison across the literature.

The extracted data were then classified according to thematic, methodological, theoretical, and contextual categories. Thematic classification helped identify the dominant research areas, such as regulatory compliance, Shariah compliance, corporate governance, internal control, compliance culture, digital transformation, and ESG-related compliance. Methodological classification was used to identify whether the studies relied on quantitative, qualitative, mixed-method, conceptual, or review-based approaches. Theoretical classification helped identify the main theories used in the literature, including Agency Theory, Institutional Theory, Stakeholder Theory, Legitimacy Theory, and Resource-Based View. Contextual classification helped map the geographical and institutional settings of the reviewed studies.

Data Analysis and Synthesis

The included literature was analyzed using thematic analysis supported by the Wase Uake system. Thematic analysis was selected because it is suitable for identifying patterns, recurring concepts, conceptual relationships, and emerging research directions across a large body of literature. Through this process, the study was able to move beyond descriptive summary and develop a more analytical synthesis of the reviewed studies.

The analysis focused on identifying how compliance risk management has been conceptualized, what governance mechanisms have been emphasized, which theoretical perspectives have dominated the literature, and what methodological trends have shaped existing research. The synthesis also examined areas of convergence and fragmentation within the literature. Areas of convergence refer to themes where studies show consistent findings, such as the importance of governance quality and Shariah oversight in reducing compliance risk. Areas of fragmentation refer to unresolved or underdeveloped issues, such as the limited integration of digital compliance tools, ESG principles, and Shariah governance within a unified analytical framework.

Methodological Rigor and Transparency

Several steps were taken to strengthen the rigor and transparency of the review. First, the study followed the PRISMA framework to document the process of article identification, screening, eligibility assessment, and inclusion. Second, the databases, keywords, timeframe, and exclusion criteria were clearly defined to support replicability. Third, duplicate records, records outside the publication period, articles without abstracts, and articles that did not meet quality considerations were removed before screening. Fourth, the final corpus was examined through a structured analytical process to ensure that the synthesis was based on relevant and substantive studies.

The use of PRISMA also helped clarify the limitations of the review process. One important limitation was the inability to retrieve 255 full-text articles because of access restrictions or incomplete publication information. This limitation was acknowledged because it may have affected the comprehensiveness of the final corpus. Nevertheless, the final set of 107 studies provided a strong and relevant foundation for analyzing the development of compliance risk management research in Islamic and conventional banking.

Summary of the Review Process

Overall, the methodology was designed to ensure that the review process was systematic, transparent, and analytically robust. Beginning with 657 identified records, the review applied a structured refinement process that removed duplicates, publications outside the selected timeframe, records without abstracts, and articles that did not meet journal quality considerations. After screening and full-text retrieval, 107 studies were included in the final analysis. These studies were then examined through thematic analysis to identify major research patterns, theoretical orientations, methodological approaches, and future research gaps.

Through this methodological design, the study provides a reliable foundation for synthesizing the literature on compliance risk management in Islamic and conventional banking. The structured application of PRISMA ensured transparency and replicability, while thematic analysis allowed the review to capture the complexity of compliance risk management as a multidimensional issue shaped by governance quality, regulatory systems, institutional context, technological development, and ethical considerations.

Result and Discussion

Descriptive Overview of the Reviewed Literature

The final corpus of this systematic literature review consisted of 107 studies published between 2015 and 2025. These studies were reviewed systematically to identify the development of compliance risk management research in Islamic and conventional banking. The analysis was not limited to summarizing previous studies, but also examined publication patterns, research contexts, methodological orientations, theoretical foundations, geographical distribution, and dominant themes across the reviewed literature. By organizing the studies through these categories, this review provides a clearer understanding of how compliance risk management has developed as a research domain.

The reviewed literature shows that scholarly attention to compliance risk management has increased over time. Earlier studies mainly focused on regulatory compliance, corporate governance, banking supervision, and risk control. More recent studies began to expand the discussion toward Shariah governance, fintech, regtech, cybersecurity, artificial intelligence, ESG, and digital compliance systems. This development indicates that compliance risk management is no longer treated merely as a formal regulatory obligation. Instead, it has increasingly been discussed as a strategic governance issue that affects institutional stability, stakeholder trust, ethical legitimacy, and long-term banking performance.

The research context of the reviewed studies also shows a strong connection between compliance risk management and Islamic banking. A substantial part of the literature focuses on Islamic banking institutions because these institutions face a dual compliance obligation. Islamic banks are required to comply not only with conventional financial regulations, but also with Shariah principles. This dual structure makes compliance risk in Islamic banking more complex than in conventional banking, as non-compliance may create legal, financial,

reputational, ethical, and religious consequences. Therefore, studies on Shariah governance, Shariah supervisory boards, Shariah audit, and Shariah disclosure appear prominently in the reviewed literature.

From a methodological perspective, the literature is dominated by quantitative empirical studies. Many studies employ panel data analysis, regression models, structural equation modeling, and other statistical techniques to examine the relationship between governance mechanisms, compliance practices, risk outcomes, and financial performance. These methods are useful for testing measurable relationships and comparing institutions across countries. However, the dominance of quantitative research also creates limitations because compliance risk management is not only a measurable technical issue, but also an organizational and cultural process. Therefore, qualitative and mixed-method studies are still needed to explain how compliance is interpreted, negotiated, and implemented within banking institutions.

The descriptive profile of the reviewed literature is summarized in Table 1. The table shows that the literature can be organized according to publication development, research context, methodological orientation, theoretical foundation, geographical concentration, and emerging research focus.

Table 1. Descriptive Profile of the Reviewed Literature

Analytical Aspect	Main Pattern Identified in the Reviewed Studies	Relevance to the Review
Publication development	Earlier studies focused on regulatory compliance, corporate governance, and banking supervision, while more recent studies increasingly discuss Shariah governance, fintech, regtech, cybersecurity, AI, ESG, and digital compliance	Shows that compliance risk management has expanded from a regulatory topic into a broader governance and strategic risk management issue
Research context	The literature covers Islamic banking, conventional banking, comparative banking, and broader financial institution settings	Demonstrates that compliance risk management is relevant across different banking systems, but Islamic banking receives strong attention due to dual compliance obligations
Methodological orientation	Quantitative studies are dominant, while qualitative and mixed-method studies remain less visible	Indicates strong empirical testing but limited exploration of organizational culture, ethical reasoning, and behavioral compliance
Theoretical foundation	Agency Theory, Institutional Theory, Stakeholder Theory, Legitimacy Theory, and the Resource-Based View are frequently used	Shows that the literature mainly explains compliance through governance control, institutional pressure, legitimacy, and organizational capability
Geographical concentration	Studies are concentrated in Malaysia, Indonesia, South Asia, and GCC countries	Reflects the importance of Islamic finance development, Shariah governance

		frameworks, and dual banking systems in these regions
Emerging research focus	Digital transformation, ESG, AI-driven compliance, cybersecurity, and regtech appear increasingly in recent studies	Indicates that compliance risk management is moving toward technology-enabled and value-based governance

Overall, the descriptive overview suggests that compliance risk management has developed into a multidimensional research field. The reviewed studies consistently show that compliance risk is shaped by regulatory frameworks, governance structures, Shariah oversight, technological capability, organizational culture, and stakeholder expectations. However, the literature remains uneven because many studies are concentrated in specific regions and rely heavily on quantitative methods. This indicates the need for broader geographical coverage and more diverse methodological approaches in future research.

Thematic Coding and Cluster Development

The thematic classification in this review was developed through a systematic coding process. First, the titles, abstracts, keywords, theoretical frameworks, methods, and findings of the reviewed studies were examined to identify recurring concepts. Second, similar concepts were grouped into broader categories. Third, these categories were refined into thematic clusters based on their relevance to compliance risk management in Islamic and conventional banking. This process ensured that the thematic clusters were not determined subjectively, but emerged from repeated patterns across the reviewed literature.

The coding process produced four major thematic clusters. The first cluster relates to regulatory compliance and banking risk management. This cluster includes studies discussing prudential regulation, Basel standards, anti-money laundering requirements, financial reporting, regulatory enforcement, risk disclosure, and supervisory mechanisms. Studies in this cluster generally examine how banks respond to regulatory pressure and how compliance systems contribute to risk reduction, financial stability, and institutional accountability.

The second cluster focuses on Shariah compliance and Shariah governance. This cluster includes studies on Shariah supervisory boards, Shariah audit, Shariah disclosure, Shariah non-compliance risk, and the role of religious governance in Islamic financial institutions. The reviewed studies show that Shariah compliance is not merely a legal requirement, but also a source of ethical and religious legitimacy. Failure to comply with Shariah principles may damage stakeholder trust and weaken the credibility of Islamic banks.

The third cluster concerns corporate governance and internal control mechanisms. This cluster includes studies examining board independence, audit committee effectiveness, risk management committees, ownership structure, transparency, and internal control systems. The literature generally suggests that strong corporate governance supports compliance risk management by improving monitoring, reducing managerial opportunism, and strengthening accountability. However, some studies also show that governance structures do not always produce positive outcomes when they are implemented only as formal requirements without real independence or effectiveness.

The fourth cluster addresses digital transformation and technology-enabled compliance. This cluster includes studies on fintech, regtech, artificial intelligence, cybersecurity, blockchain, digital banking, and automated compliance tools. Although this theme is still less developed than governance-related themes, it has become increasingly important in recent studies. Digital technologies can improve monitoring, reporting, data processing, and risk detection. However,

they also create new risks, including cybersecurity threats, algorithmic opacity, data governance problems, and accountability gaps.

Table 2. Thematic Classification of the Reviewed Studies

Thematic Cluster	Focus	Key Issues Discussed in the Literature	Relevance to Compliance Risk Management
Regulatory compliance and banking risk management	Compliance with financial regulations and prudential standards	Basel standards, anti-money laundering requirements, financial reporting, risk disclosure, regulatory enforcement, and supervisory mechanisms	Explains how external regulation shapes banks' compliance structures, risk control systems, and institutional accountability
Shariah compliance and Shariah governance	Compliance with Islamic principles in banking operations	Shariah supervisory boards, Shariah audit, Shariah disclosure, Shariah non-compliance risk, and religious legitimacy	Explains the distinctive compliance challenges faced by Islamic banks under dual regulatory and Shariah-based obligations
Corporate governance and internal control	Internal governance mechanisms supporting compliance	Board independence, audit committee effectiveness, risk management committees, ownership structure, transparency, and internal control systems	Demonstrates how governance quality influences monitoring, accountability, managerial behavior, and compliance effectiveness
Digital transformation and technology-enabled compliance	The use of technology in compliance and risk management	Fintech, regtech, artificial intelligence, cybersecurity, blockchain, digital banking, and automated compliance tools	Highlights the emerging role of digital systems in improving monitoring, reporting, risk detection, and regulatory responsiveness

These four clusters demonstrate that compliance risk management is not a single-dimensional concept. It is shaped by the interaction of regulation, governance, Shariah principles, technology, and institutional context. The thematic analysis also shows that the literature has gradually moved from traditional discussions of regulation and governance toward more complex debates involving digital compliance, sustainability, and ethical accountability.

Results Based on the TCCM Framework

The reviewed studies were also analyzed using the TCCM framework, which consists of Theory, Context, Characteristics, and Methodology. This framework was used to organize the literature more systematically and to identify the main theoretical, contextual, substantive, and methodological patterns in compliance risk management research.

In terms of Theory, the literature is mainly supported by Agency Theory, Institutional Theory, Stakeholder Theory, Legitimacy Theory, and the Resource-Based View. Agency Theory is commonly used to explain how governance mechanisms reduce information asymmetry and

managerial opportunism. Institutional Theory is used to explain how banks respond to regulatory pressure, professional norms, and institutional expectations. Stakeholder Theory is frequently applied in studies discussing transparency, accountability, Shariah legitimacy, and ESG-related responsibilities. The Resource-Based View appears in studies that treat compliance capability, governance expertise, and digital infrastructure as strategic organizational resources.

In terms of Context, the literature is concentrated in countries with relatively developed Islamic banking systems and active regulatory frameworks. Malaysia, Indonesia, Pakistan, Bangladesh, and GCC countries appear frequently in the reviewed studies. This geographical concentration reflects the importance of Islamic banking and Shariah governance in these jurisdictions. These countries provide a relevant context for studying compliance risk because Islamic banks operate under both conventional financial regulation and Shariah-based governance requirements.

In terms of Characteristics, the reviewed studies frequently examine board structure, Shariah supervisory board characteristics, audit committee quality, risk disclosure, compliance culture, regulatory pressure, digital capability, ESG disclosure, and financial performance. These constructs indicate that the literature mainly views compliance risk management as an outcome of governance quality, regulatory pressure, and institutional capability. However, softer organizational factors, such as employee behavior, ethical leadership, compliance culture, and informal decision-making, receive less attention.

In terms of Methodology, quantitative methods dominate the reviewed literature. This methodological preference has strengthened empirical testing in the field, especially in studies examining the relationship between governance, compliance, risk, and performance. However, it also limits deeper understanding of how compliance operates in practice. Since compliance risk management involves organizational values, ethical reasoning, institutional culture, and human judgment, future studies need to employ more qualitative and mixed-method approaches.

Table 3. TCCM Classification of the Reviewed Literature

TCCM Dimension	Main Findings from the Reviewed Studies	Interpretation
Theory	The literature is mainly supported by Agency Theory, Institutional Theory, Stakeholder Theory, Legitimacy Theory, and the Resource-Based View	Existing studies commonly explain compliance risk management through governance control, regulatory pressure, stakeholder accountability, legitimacy, and organizational capability
Context	Studies are concentrated in Islamic and conventional banking, with strong attention to Malaysia, Indonesia, South Asia, and GCC countries	The dominance of these regions reflects the institutional maturity of Islamic finance, dual banking systems, and active Shariah governance frameworks
Characteristics	Frequently examined constructs include board structure, Shariah	The literature mainly views compliance risk management as

	supervisory board characteristics, audit committee quality, regulatory pressure, compliance culture, ESG disclosure, digital capability, and financial performance	an outcome of governance quality, institutional pressure, Shariah oversight, and organizational resources
Methodology	Quantitative studies dominate, especially panel data analysis, regression models, and structural equation modeling, while qualitative and mixed-method studies remain limited	Although quantitative methods strengthen empirical testing, they may not fully capture organizational culture, ethical reasoning, informal governance, and behavioral compliance

The TCCM analysis shows that compliance risk management research has a relatively strong theoretical and empirical foundation, but remains uneven in its contextual and methodological development. The field is theoretically concentrated around established governance and institutional theories, geographically concentrated in Islamic finance hubs, and methodologically concentrated in quantitative designs.

Results Based on the CIMO Framework

The CIMO framework was used to interpret how compliance risk management works across different banking contexts. The framework consists of Context, Intervention, Mechanism, and Outcome. This framework is useful because it explains not only what compliance practices exist, but also how and why they produce certain results.

The Context dimension shows that compliance risk management is strongly influenced by regulatory systems, institutional maturity, market structure, and religious governance requirements. In Islamic banking, compliance risk is more complex because banks must satisfy both financial regulators and Shariah authorities. In conventional banking, compliance risk is more commonly associated with prudential regulation, anti-money laundering rules, reporting requirements, internal control, and financial stability.

The Intervention dimension includes governance reforms, Shariah supervisory mechanisms, internal audit systems, risk management committees, compliance training, disclosure practices, regtech adoption, and digital monitoring tools. These interventions represent the formal mechanisms used by banks to reduce compliance risk. The reviewed studies show that governance-related interventions remain the most widely discussed, while digital and technology-based interventions are still emerging.

The Mechanism dimension explains how these interventions influence compliance outcomes. Corporate governance mechanisms improve compliance by strengthening monitoring, transparency, accountability, and control. Shariah governance mechanisms reduce Shariah non-compliance risk by providing religious oversight, ethical guidance, and stakeholder assurance. Digital compliance tools improve compliance by increasing data accuracy, automating reporting, detecting anomalies, and reducing human error. However, these mechanisms do not work automatically. Their effectiveness depends on independence, expertise, enforcement quality, organizational culture, technological readiness, and institutional support.

The Outcome dimension includes reduced compliance risk, improved disclosure quality, stronger stakeholder trust, lower reputational risk, better financial performance, and enhanced institutional legitimacy. However, the relationship between compliance intervention and

outcome is not always positive. Some studies indicate that excessive compliance requirements may increase operational costs and reduce flexibility. Therefore, compliance risk management produces positive outcomes only when it is integrated into governance and strategic risk management, rather than treated as a checklist-oriented administrative function.

Table 4. CIMO Framework of Compliance Risk Management in Banking

CIMO Element	Key Elements Identified in the Literature	Explanation
Context	Islamic banking, conventional banking, dual banking systems, regulatory environments, Shariah governance systems, institutional maturity, and market structure	Compliance risk management is shaped by the institutional and regulatory environment in which banks operate
Intervention	Corporate governance reforms, Shariah supervisory mechanisms, internal audit, risk committees, compliance training, disclosure practices, regtech adoption, and digital monitoring tools	Banks use formal governance, regulatory, Shariah, and technological mechanisms to reduce compliance risk
Mechanism	Monitoring, transparency, accountability, religious oversight, ethical legitimacy, automation, risk detection, data accuracy, and stakeholder assurance	Compliance interventions influence outcomes by improving oversight, reducing information asymmetry, strengthening legitimacy, and enhancing risk control
Outcome	Reduced compliance risk, improved disclosure quality, stronger stakeholder trust, lower reputational risk, better institutional legitimacy, and possible performance improvement	Compliance outcomes are positive when compliance mechanisms are integrated into effective governance and risk management systems

The CIMO analysis demonstrates that compliance outcomes are conditional. The same compliance mechanism may produce different results depending on institutional context, governance quality, organizational culture, and resources available within the bank. For example, a Shariah supervisory board may reduce Shariah non-compliance risk only when it has sufficient independence, expertise, and authority. Similarly, digital compliance tools may improve monitoring and reporting only when supported by strong data governance, cybersecurity protection, and human oversight.

Geographical Distribution and Institutional Patterns

The reviewed literature shows a clear geographical concentration in Southeast Asia, South Asia, and the Gulf Cooperation Council countries. Malaysia and Indonesia are especially prominent because both countries have dual banking systems, growing Islamic finance sectors, and active regulatory development in Shariah governance. Malaysia is often used as a reference point because of its relatively mature Islamic finance regulatory framework and centralized Shariah governance model. Indonesia has also become an important context because of the expansion of Islamic banking, regulatory consolidation, and increasing attention to halal finance and Shariah-based financial inclusion.

The GCC countries also occupy an important position in the literature. Islamic finance is deeply embedded in the financial systems of several GCC jurisdictions, and compliance risk

management in these countries is closely linked to Shariah legitimacy, market confidence, and national financial development strategies. However, the GCC context differs from Southeast Asia. While Malaysia and Indonesia tend to emphasize formal regulatory frameworks and institutionalized Shariah governance, GCC countries often reflect stronger connections between Islamic finance, religious authority, market tradition, and national economic policy.

Studies from Europe and North America are less dominant and generally focus on conventional banking. These studies tend to discuss regulatory enforcement, anti-money laundering compliance, post-crisis governance reforms, ethical compliance, and internal control systems. This differs from the Islamic finance literature, where compliance risk is often discussed in relation to Shariah governance, religious legitimacy, and ethical accountability.

This geographical distribution shows that compliance risk management is not a uniform concept. It is shaped by local regulation, institutional history, religious norms, market structure, and cultural expectations. The dominance of Malaysia, Indonesia, and GCC countries also creates a limitation because the current literature may overrepresent relatively mature Islamic finance systems. More research is needed in underexplored regions such as Sub-Saharan Africa, Latin America, and emerging Islamic finance markets to develop a more global understanding of compliance risk management.

Governance, Shariah Governance, and Compliance Outcomes

The reviewed studies generally show that corporate governance plays an important role in compliance risk management. Board independence, audit committee effectiveness, risk management committees, ownership structure, and transparency are frequently associated with stronger compliance outcomes. These mechanisms help banks monitor managerial behavior, improve disclosure, reduce risk exposure, and strengthen accountability.

However, the findings are not entirely consistent. Some studies show that formal governance structures do not always lead to better compliance outcomes. For example, the existence of a board committee does not automatically improve compliance if the committee lacks independence, expertise, or authority. Similarly, board size or board composition may have limited impact when governance practices are symbolic rather than substantive. These mixed findings suggest that governance quality is more important than governance structure alone.

In Islamic banking, Shariah governance is often found to strengthen compliance quality and stakeholder trust. Shariah supervisory boards, Shariah audits, and Shariah disclosure mechanisms provide a specialized layer of oversight that distinguishes Islamic banks from conventional banks. These mechanisms are important because Shariah non-compliance can damage not only financial performance, but also religious legitimacy and institutional credibility.

Nevertheless, Shariah governance also faces several challenges. The reviewed literature identifies concerns related to Shariah board independence, multiple board memberships, limited transparency, managerial influence, and differences in Shariah interpretation across jurisdictions. These issues show that Shariah governance cannot be evaluated only by the presence of a Shariah supervisory board. It must also be assessed through the quality of its independence, expertise, authority, disclosure, and integration with broader corporate governance systems.

Compliance Risk Management and Performance Outcomes

The relationship between compliance risk management and organizational performance is complex and conditional. Several studies suggest that strong compliance systems may improve

performance by reducing regulatory penalties, increasing transparency, strengthening operational stability, and enhancing stakeholder trust. In Islamic banking, Shariah compliance may also support performance by increasing customer confidence and reinforcing the religious legitimacy of financial products and services.

However, compliance does not always produce positive performance outcomes. Some studies suggest that compliance can increase administrative costs, slow decision-making, reduce flexibility, and create operational burdens. This is especially relevant in highly regulated environments where banks must comply with multiple overlapping rules and reporting obligations. In such cases, compliance may become costly if it is implemented only as a formal requirement rather than as part of strategic governance.

The performance effect of compliance depends on several conditions. Compliance is more likely to improve performance when banks have strong governance, effective internal control, competent compliance officers, supportive organizational culture, and adequate technological infrastructure. In contrast, compliance may have limited or negative effects when governance is weak, enforcement is symbolic, resources are limited, or compliance is treated only as an administrative checklist.

The literature also suggests that the effect of compliance may differ between short-term and long-term performance. In the short term, compliance may increase costs because banks must invest in systems, audits, reporting, training, and monitoring. In the long term, however, strong compliance may reduce reputational risk, prevent sanctions, improve stakeholder trust, and strengthen institutional resilience. Therefore, future studies should distinguish between immediate compliance costs and long-term compliance benefits.

Digital Transformation and Technology-Enabled Compliance

Digital transformation appears as an emerging but still underdeveloped theme in compliance risk management research. The reviewed studies discuss several forms of technology-enabled compliance, including fintech, regtech, artificial intelligence, cybersecurity systems, blockchain, digital banking platforms, and automated monitoring tools. These technologies are increasingly relevant because banking activities are becoming more digital, data-driven, and interconnected.

Regtech is particularly important because it can support regulatory reporting, anti-money laundering compliance, fraud detection, transaction monitoring, and real-time risk analysis. Artificial intelligence can help banks identify suspicious patterns, predict compliance risks, and improve decision-making. Blockchain may support transparency and traceability, while cybersecurity systems protect data integrity and operational resilience. These technologies show that digital transformation can improve the efficiency and accuracy of compliance risk management.

However, digital compliance also introduces new risks. Artificial intelligence may create problems of algorithmic opacity, bias, and accountability. Cybersecurity failures may become compliance failures when they affect customer data, reporting accuracy, or operational continuity. Automated systems may also reduce human judgment in areas that require ethical interpretation. These risks show that digital transformation does not simply reduce compliance risk; it also changes the nature of compliance risk.

In Islamic banking, technology-enabled compliance creates additional challenges. Shariah compliance often requires interpretation, ethical reasoning, and religious judgment. Automated systems may not fully capture the complexity of Shariah principles, especially when financial

products involve innovation or uncertainty. Therefore, the use of artificial intelligence and regtech in Islamic banking must be supported by human oversight, Shariah expertise, explainable algorithms, and clear accountability structures.

Bibliometric and Conceptual Patterns

The bibliometric reading of the reviewed literature supports the thematic analysis. Keywords related to regulatory compliance, risk management, corporate governance, Shariah governance, Islamic banking, financial stability, and banking performance appear as central concepts in the literature. These concepts are closely connected, indicating that compliance risk management is generally understood as part of a broader governance and risk management system.

The temporal pattern of keywords also shows a shift in research attention. Earlier studies were more closely related to corporate governance, regulatory compliance, Shariah supervision, and risk disclosure. More recent studies increasingly include fintech, regtech, cybersecurity, digital banking, artificial intelligence, ESG, and sustainability. This development confirms that compliance risk management is expanding beyond traditional regulation and governance toward technology-enabled and value-based compliance.

However, the bibliometric pattern also reveals fragmentation. Studies on digital transformation, ESG, and Shariah governance often develop in separate streams. This separation limits the ability of the literature to explain how banks can manage compliance risk in a financial environment where regulation, technology, sustainability, and ethical accountability are increasingly interconnected.

Summary of Results

The results show that compliance risk management research is dominated by governance-oriented studies, particularly those focusing on corporate governance, Shariah governance, regulatory compliance, and banking risk management. Thematic analysis identified four major clusters: regulatory compliance, Shariah governance, corporate governance, and digital transformation. These clusters show that compliance risk management is shaped by both external regulatory pressure and internal governance capability.

The TCCM analysis shows that the literature is mainly grounded in Agency Theory, Institutional Theory, Stakeholder Theory, Legitimacy Theory, and the Resource-Based View. The CIMO analysis shows that compliance outcomes depend on the interaction between context, intervention, mechanism, and outcome. Geographically, the literature is concentrated in Malaysia, Indonesia, South Asia, and GCC countries, while other regions remain underexplored.

Table 5. Summary of Key Research Gaps Identified from the Reviewed Literature

Research Gap	Explanation	Suggested Future Research Direction
Limited analysis of AI-driven compliance	Artificial intelligence is increasingly mentioned, but its role in compliance decision-making remains underexplored	Future studies should examine explainability, algorithmic bias, accountability, and human oversight in AI-based compliance systems
Underdeveloped ESG-Shariah integration	ESG and Shariah governance are often discussed separately	Future research should examine how ESG principles can be aligned with Maqasid al-Shariah,

		Shariah governance, and Islamic banking disclosure
Geographical concentration	Most studies focus on Malaysia, Indonesia, South Asia, and GCC countries	Future research should include underexplored regions such as Sub-Saharan Africa, Latin America, and emerging Islamic finance markets
Dominance of quantitative methods	Many studies rely on statistical models, while organizational and behavioral dimensions remain less visible	Future studies should use qualitative and mixed method designs to examine compliance culture, ethical leadership, and internal decision-making
Limited cross-jurisdictional comparison	Differences in regulatory systems and Shariah governance models are not fully compared	Future research should compare compliance risk management across different legal, regulatory, and institutional environments
Insufficient attention to digital risks	Digital compliance tools are discussed positively, but risks such as cybersecurity, data governance, and algorithmic opacity remain underexamined	Future studies should investigate how digital transformation creates new forms of compliance risk

The results indicate that compliance risk management is best understood as a multidimensional construct shaped by governance quality, regulatory context, Shariah oversight, technological capability, organizational culture, and stakeholder expectations. At the same time, the literature remains uneven in its treatment of digital transformation, ESG-Shariah integration, contradictory findings, and cross-jurisdictional regulatory harmonization.

Reinterpreting Compliance Risk Management as a Governance Capability

The findings of this review suggest that compliance risk management should not be understood merely as a technical response to regulation. Instead, it should be interpreted as a governance capability that helps banks manage regulatory, ethical, technological, reputational, and institutional risks. This interpretation is supported by the dominance of governance-related themes in the reviewed literature, including board oversight, audit committees, Shariah supervisory boards, risk committees, disclosure practices, and internal control systems.

From the perspective of Agency Theory, compliance risk management functions as a mechanism for reducing managerial opportunism and information asymmetry. Governance structures such as boards and audit committees strengthen monitoring and accountability. From the perspective of Institutional Theory, compliance reflects banks' responses to regulatory pressure, industry norms, and institutional expectations. Banks adopt compliance systems not only to avoid sanctions, but also to maintain legitimacy in the eyes of regulators and the market (De Souza & De Souza, 2024; Johnson, 2023).

Stakeholder Theory further explains why compliance is important beyond legal obligations. Banks are accountable to regulators, shareholders, customers, employees, religious authorities, and the wider society. In Islamic banking, this accountability becomes more complex because stakeholders expect banks to comply with both financial regulations and Shariah principles. The Resource-Based View adds another layer by showing that compliance expertise, governance capability, digital infrastructure, and ethical legitimacy can become strategic resources that support long-term competitiveness.

These theories should be understood as complementary rather than separate. Agency Theory explains internal control, Institutional Theory explains external pressure, Stakeholder Theory explains legitimacy and accountability, while the Resource-Based View explains how compliance capability can create organizational value. Together, these theories provide a stronger conceptual framework for understanding compliance risk management as a strategic governance capability.

Corporate Governance and Shariah Governance: Complementarity and Tension

The findings show that corporate governance and Shariah governance are complementary in Islamic banking. Corporate governance provides general mechanisms for oversight, accountability, transparency, and risk control. Shariah governance adds a specific layer of religious and ethical supervision. When these two systems are aligned, Islamic banks are more likely to strengthen compliance quality, reduce reputational risk, and improve stakeholder trust.

However, the relationship between corporate governance and Shariah governance is not always simple. The reviewed literature shows that governance mechanisms may become ineffective when they exist only formally. A bank may have a board committee, audit committee, or Shariah supervisory board, but these mechanisms may fail to reduce compliance risk if they lack independence, expertise, authority, or transparency. This explains why some studies report mixed or insignificant findings regarding the effect of governance structures on compliance outcomes.

Shariah governance also creates specific challenges. Differences in Shariah interpretation across jurisdictions may result in inconsistent compliance standards. Managerial influence may weaken the independence of Shariah supervisory boards. Multiple board memberships may reduce the effectiveness of Shariah supervision. Limited disclosure may also reduce stakeholder confidence. Therefore, Shariah governance should not be evaluated only by the existence of Shariah boards, but also by their actual independence, competence, authority, and integration with the bank's broader governance system.

This discussion suggests that the effectiveness of compliance risk management depends on the quality of governance, not merely the presence of governance structures. Strong governance requires substantive oversight, clear authority, transparent disclosure, and meaningful integration between corporate governance and Shariah governance.

Geographical Concentration and Contextual Dependence

The dominance of Malaysia, Indonesia, and GCC countries in the reviewed literature reflects the institutional strength of Islamic finance in these regions. Malaysia is frequently studied because it has a mature Islamic finance regulatory system and a centralized Shariah governance framework. Indonesia is important because of the rapid development of Islamic banking, regulatory consolidation, and increasing attention to Shariah-based financial inclusion. GCC countries are also central because Islamic banking is deeply connected with religious authority, market development, and national financial strategies.

However, this geographical concentration also limits the generalizability of the literature. Compliance risk management practices developed in Malaysia may not be fully applicable to Indonesia, GCC countries, or emerging Islamic finance markets. Each jurisdiction has different legal systems, regulatory structures, Shariah governance models, institutional capacities, and cultural expectations. Therefore, compliance risk management should be understood as context-dependent.

The limited number of studies from Sub-Saharan Africa, Latin America, and other emerging Islamic finance markets indicates a major research gap. These regions may face different compliance challenges, such as weak regulatory enforcement, limited Shariah governance infrastructure, lower institutional capacity, and different levels of financial development. Future research should examine these underrepresented contexts to provide a more balanced and global understanding of compliance risk management.

Compliance Risk Management and Performance: A Conditional Relationship

The findings show that the relationship between compliance risk management and organizational performance is not automatically positive. Compliance can improve performance when it reduces regulatory penalties, strengthens transparency, improves operational discipline, increases stakeholder trust, and enhances institutional legitimacy. In Islamic banking, Shariah compliance may also improve customer confidence and strengthen the credibility of Islamic financial products.

However, compliance can also create costs. Banks may need to invest in compliance officers, reporting systems, audits, training, legal review, technology, and monitoring mechanisms. These investments may reduce short-term profitability or slow decision-making. Compliance may also become burdensome when regulations are overlapping, unclear, or excessively rigid. Therefore, compliance risk management can support performance only when it is implemented strategically.

This means that compliance should not be treated as a checklist or administrative obligation. It should be integrated into governance, risk management, strategic planning, and organizational culture. When compliance is embedded in these areas, it can create long-term value. When it is treated only as a formal requirement, it may become costly and ineffective.

The findings also suggest that future studies should distinguish between different types of performance. Compliance may affect accounting-based performance, market-based performance, reputational performance, and long-term resilience in different ways. Short-term financial indicators may not immediately show the benefits of compliance, while long-term outcomes such as trust, legitimacy, and stability may be more difficult to measure but highly important.

Digital Transformation as an Emerging Compliance Frontier

Digital transformation represents one of the most important developments in compliance risk management. The reviewed literature shows that fintech, regtech, artificial intelligence, cybersecurity, blockchain, and digital monitoring tools are increasingly discussed, although this theme remains less developed than corporate governance and Shariah governance. This indicates that digital compliance is still an emerging research area.

Technology can improve compliance risk management by increasing monitoring efficiency, improving reporting accuracy, reducing human error, and detecting suspicious transactions. Regtech can help banks comply with regulatory reporting and anti-money laundering requirements. Artificial intelligence can support risk prediction and anomaly detection. Cybersecurity systems can protect customer data and operational resilience. Blockchain can improve transparency and transaction traceability.

However, digital transformation also creates new compliance risks. Artificial intelligence may produce decisions that are difficult to explain. Algorithms may contain bias. Cybersecurity failures may expose banks to legal and reputational risk. Data governance problems may

weaken accountability. These risks show that digital transformation does not only support compliance; it also changes the nature of compliance itself.

In Islamic banking, digital compliance requires special attention. Shariah compliance involves ethical interpretation and religious reasoning, which may not be fully captured by automated systems. Therefore, AI-driven compliance systems in Islamic banking must be designed with explainability, human supervision, Shariah expertise, and clear accountability. Future research should examine how digital systems can support Shariah compliance without replacing the interpretive role of qualified Shariah authorities.

ESG-Shariah Integration and the Expansion of Compliance

The reviewed literature shows that ESG and sustainability are increasingly relevant to compliance risk management, but their integration with Shariah governance remains limited. This is an important issue because Islamic finance is closely related to ethical accountability, social justice, fairness, and responsible economic activity. These values are also central to many ESG discussions.

The integration of ESG principles with Maqasid al-Shariah may strengthen the legitimacy of Islamic banking. It may also help Islamic financial institutions respond to global sustainability expectations while maintaining their religious and ethical identity. However, ESG and Shariah governance are not identical. ESG frameworks are often based on global sustainability standards, while Shariah governance is based on Islamic legal and ethical principles. Therefore, their integration requires careful conceptual and practical alignment.

Future research should not only state that ESG and Shariah principles are compatible. More detailed studies are needed to examine how Islamic banks implement ESG-Shariah integration in governance, reporting, product development, risk management, and performance evaluation. This would make the literature more specific and useful for regulators, banks, and scholars.

Theoretical Contribution and Integrative Framework

This review contributes theoretically by integrating Agency Theory, Institutional Theory, Stakeholder Theory, and the Resource-Based View into a single conceptual explanation of compliance risk management. Agency Theory explains the importance of internal monitoring and control. Institutional Theory explains how external regulation and normative pressure influence bank behavior. Stakeholder Theory explains why compliance is important for legitimacy, trust, and accountability. The Resource-Based View explains how compliance capability, digital infrastructure, and governance expertise can become strategic assets.

Based on this integration, compliance risk management can be understood as the result of four interacting forces. First, governance structures create internal accountability. Second, regulatory institutions create external pressure. Third, stakeholders create legitimacy expectations. Fourth, organizational resources determine whether banks can implement compliance effectively. When these four forces are aligned, compliance risk management is more likely to improve institutional resilience and long-term performance.

This theoretical integration also helps explain contradictory findings in the literature. Governance mechanisms may fail when enforcement is weak. Regulatory pressure may increase costs when banks lack sufficient resources. Stakeholder trust may not improve when disclosure is symbolic. Digital tools may not reduce compliance risk when organizational culture and human oversight are weak. Therefore, compliance outcomes depend on the interaction between governance, regulation, stakeholders, and resources.

Future research should address several specific gaps. First, more studies are needed on AI-driven compliance systems in banking. Researchers should examine how artificial intelligence is used in regulatory reporting, anti-money laundering compliance, fraud detection, customer due diligence, Shariah screening, and risk prediction. Particular attention should be given to algorithmic transparency, explainability, accountability, bias, and ethical oversight.

Second, future studies should examine ESG-Shariah integration more systematically. Researchers should investigate how ESG principles interact with Maqasid al-Shariah, Shariah governance, sustainability reporting, stakeholder legitimacy, and financial performance. This would help clarify whether ESG-Shariah integration reduces reputational risk, improves disclosure quality, and strengthens long-term institutional legitimacy.

Third, cross-jurisdictional regulatory harmonization should receive greater attention. Comparative studies across Malaysia, Indonesia, GCC countries, South Asia, Europe, and emerging Islamic finance markets are needed to explain how different legal systems, regulatory models, Shariah governance structures, and enforcement capacities shape compliance risk management.

Fourth, future research should examine organizational culture and behavioral compliance. Compliance depends not only on formal governance structures, but also on employee behavior, ethical leadership, training, communication, and organizational values. Qualitative and mixed-method studies are especially useful for understanding these internal dynamics.

Fifth, more longitudinal studies are needed to examine how compliance risk management evolves over time. Such studies can explain whether compliance investments produce long-term performance benefits, how banks adapt to regulatory changes, and how digital transformation reshapes compliance systems.

For regulators, the findings suggest that compliance frameworks should move beyond checklist-based supervision. Regulators need to develop adaptive frameworks that address corporate governance, Shariah governance, digital transformation, cybersecurity, ESG reporting, and AI-based compliance systems. Regulation should provide clarity while still allowing banks to respond flexibly to technological and institutional changes.

For Islamic banks, the findings highlight the need to strengthen both corporate governance and Shariah governance. Shariah supervisory boards should be independent, competent, transparent, and integrated with broader risk management systems. Shariah compliance should not be treated as a separate religious formality, but as part of institutional governance and stakeholder accountability.

For bank managers, compliance should be viewed as a strategic capability rather than merely an administrative cost. Investment in compliance technology, staff training, ethical culture, governance quality, and data management can improve institutional resilience. However, technology should be implemented with proper human oversight to prevent algorithmic opacity, cybersecurity risks, and accountability gaps.

This review shows that compliance risk management in Islamic and conventional banking is shaped by the interaction of governance quality, regulatory pressure, Shariah oversight, technological capability, organizational culture, and stakeholder expectations. The field has developed significantly, but it remains uneven in theoretical integration, geographical representation, methodological diversity, and treatment of emerging issues such as AI-driven compliance and ESG-Shariah integration.

The Results section has shown the main patterns found in the reviewed literature, including thematic clusters, TCCM classification, CIMO interpretation, geographical patterns, governance findings, performance relationships, digital transformation, and bibliometric patterns. The Discussion section has interpreted these findings by explaining their theoretical meaning, practical implications, and future research directions. By separating findings from interpretation, this review provides a clearer and more balanced contribution to compliance risk management research in Islamic and conventional banking.

Conclusion

This systematic literature review concludes that compliance risk management in Islamic and conventional banking has evolved into a multidimensional field shaped by the interaction of regulatory pressure, corporate governance, Shariah governance, technological capability, organizational culture, and stakeholder expectations. The review of 107 studies published between 2015 and 2025 shows that the literature is mainly structured around four major themes: regulatory compliance and banking risk management, Shariah compliance and Shariah governance, corporate governance and internal control, and digital transformation in compliance practices. While existing studies generally emphasize the positive role of governance mechanisms, Shariah oversight, and regulatory compliance in strengthening institutional stability and legitimacy, the findings also indicate that compliance outcomes are not always linear or uniformly positive, as they depend on governance quality, regulatory enforcement, organizational resources, and contextual conditions. The review further reveals that the literature remains geographically concentrated in Malaysia, Indonesia, South Asia, and GCC countries, and methodologically dominated by quantitative approaches, leaving organizational culture, behavioral compliance, and underexplored jurisdictions insufficiently examined. In addition, emerging issues such as AI-driven compliance systems, regtech, cybersecurity, ESG-Shariah integration, and cross-jurisdictional regulatory harmonization require deeper empirical and theoretical investigation. Therefore, future research should move toward more context-sensitive, methodologically diverse, and theoretically integrated approaches to better explain how banks can manage compliance risk in an increasingly digital, regulated, and ethically complex financial environment.

References

- Abdulrahman, Z., Ebrahimi, T., & Al-Najjar, B. (2023). Exploring the nexus between Islamic financial institutions' Shariah compliance disclosure and corporate governance: New insights from a cross-country analysis. *International Journal of Finance & Economics*. <https://doi.org/10.1002/ijfe.2891>
- Alajmi, A. E., & Al-Shammari, B. A. (2024). Corporate governance impact on risk disclosure in Shariah-compliant financial firms of Kuwait. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-02-2024-0070>
- Alam, M. K. (2021). A proposed centralized Shariah governance framework for Islamic banks in Bangladesh. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-03-2021-0106>
- Alam, M. K., & Miah, M. S. (2024). Do Islamic banks use institutional theory in the light of Shariah governance? Empirical evidence from a Muslim dominant country. *Heliyon*, 10(2). <https://doi.org/10.1016/j.heliyon.2024.e24252>
- Alam, M. K., Rahman, M. M., Runy, M. K., Adedeji, B. S., & Hassan, M. F. (2021). The influences of Shariah governance mechanisms on Islamic banks' performance and

Shariah compliance quality. *Asian Journal of Accounting Research*.
<https://doi.org/10.1108/AJAR-11-2020-0112>

- Alrawhani, E. M., Romli, A. B., Al-Sharafi, M. A., & Alkaws, G. (2025). Integrating information security culture and protection motivation to enhance compliance with information security policies in banking: Evidence from PLS-SEM and fsQCA. *International Journal of Human-Computer Interaction*.
<https://doi.org/10.1080/10447318.2025.2464900>
- Alsaghir, M. (2023). Digital risks and Islamic FinTech: a road map to social justice and financial inclusion. *Journal of Islamic Accounting and Business Research*.
<https://doi.org/10.1108/JIABR-10-2022-0262>
- Alsobai, B., & Aassouli, D. (2025). Assessing Digital Transformation Strategies in Retail Banks: A Global Perspective. *Journal of Risk and Financial Management*, 18(12), 710. <https://doi.org/10.3390/jrfm18120710>
- Ayub, M., Hassan, M. K., & Saba, I. (2024). Revisiting the paradigm of Shari'ah governance of Islamic financial institutions. *Journal of Islamic Accounting and Business Research*, 15(8), 1245-1265. <https://doi.org/10.1108/JIABR-04-2022-0110>
- Basiruddin, R., & Ahmed, H. (2019). Corporate governance and Shariah non-compliant risk in Islamic banks: Evidence from Southeast Asia. *Corporate Governance: The International Journal of Business in Society*. <https://doi.org/10.1108/CG-05-2019-0138>
- Batizani, D. (2026). Corporate Governance and Financial Sustainability of Higher Education Institutions in Malawi. *Journal of Business Insight and Innovation*, 5(1), 1-23.
- Boudawara, Y., Toumi, K., Wannes, A., & Hussainey, K. (2023). Shariah governance quality and environmental, social and governance performance in Islamic banks: A cross-country evidence. *Journal of Applied Accounting Research*.
<https://doi.org/10.1108/JAAR-08-2022-0208>
- Burdon, W. M., & Sorour, M. K. (2018). Institutional theory and evolution of a legitimate compliance culture: The case of the UK financial service sector. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-018-3981-4>
- De Souza, M. C. S., & De Souza, R. S. (2024). Law enforcement, social demands and reputation risks as drivers of compliance functions: a comparative analysis of the largest banks' disclosures in the UK and Brazil. *Crime, Law and Social Change*, 81(3), 255-280. <https://doi.org/10.1007/s10611-023-10116-8>
- El-Halaby, S., Omair Alotaibi, K., Alqatan, A., & Al-Alawi, A. N. S. (2023). The consequences of AAOIFI adoption: countrywide perspectives. In *Islamic Accounting and Finance: A Handbook* (pp. 197-235). https://doi.org/10.1142/9781800612426_0007
- Fatmawati, D., Ariffin, N. M., Abidin, N. H. Z., & Osman, A. Z. (2022). Shariah governance in Islamic banks: Practices, practitioners and praxis. *Global Finance Journal*, 51, 100555. <https://doi.org/10.1016/j.gfj.2020.100555>
- Friday, S. C., Lawal, C. I., Ayodeji, D. C., & Sobowale, A. (2022). Strategic model for building institutional capacity in financial compliance and internal controls across fragile economies. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), 944-954.

- Grassa, R. (2015). Corporate governance and credit rating in Islamic banks: Does Shariah governance matter? *Journal of Management & Governance*. <https://doi.org/10.1007/s10997-015-9322-4>
- Haridan, N. M., Hassan, A. F. S., & Karbhari, Y. (2018). Governance, religious assurance and Islamic banks: Do Shariah boards effectively serve? *Journal of Management and Governance*. <https://doi.org/10.1007/s10997-018-9418-8>
- Hassan, M. K., & Raza Rabbani, M. (2023). Sharia governance standards and the role of AAOIFI: a comprehensive literature review and future research agenda. *Journal of Islamic Accounting and Business Research*, 14(5), 677-698. <https://doi.org/10.1108/JIABR-04-2022-0111>
- Iqbal, H. R., Shahzad, M. A., & Malik, M. (2025). Sharī'ah Audit Guidelines in Islamic Financial Institutions: A Comparative and Analytical Study. *Majallah-e-Talim o Tahqiq*, 7(2).
- Johnson, W. G. (2023). Caught in quicksand? Compliance and legitimacy challenges in using regulatory sandboxes to manage emerging technologies. *Regulation & Governance*, 17(3), 709-725. <https://doi.org/10.1111/rego.12487>
- Karlsson, M., Karlsson, F., Åström, J., & Denk, T. (2021). The effect of perceived organizational culture on employees' information security compliance. *Information & Computer Security*. <https://doi.org/10.1108/ICS-06-2021-0073>
- Komandla, V., & Perumalla, S. (2017). Transforming traditional banking: Strategies, challenges, and the impact of fintech innovations. *Educational Research (IJMCER)*, 1(6), 01-09.
- Mayienga, B. A., Onwuzulike, O. C., Oyeyipo, I., Ayodeji, D. C., Nwaozumudoh, M. O., Attipoe, V., & Ahmadu, J. (2024). A conceptual model for global risk management, compliance, and financial governance in multinational corporations. *International Journal of Advanced Multidisciplinary Research and Studies*, 1351-1363. <https://doi.org/10.62225/2583049X.2024.4.6.3916>
- Minhas, I. H. (2023). Shariah governance for Islamic financial institutions. In *Shariah governance in Islamic banking institutions* (pp. 152-175). Routledge.
- Mohd Zain, F. A., Muhamad, S. F., Abdullah, H., Sheikh Ahmad Tajuddin, S. A. F., & Wan Abdullah, W. A. (2024). Integrating environmental, social and governance (ESG) principles with Maqasid al-Shariah: A blueprint for sustainable takaful operations. *International Journal of Islamic and Middle Eastern Finance and Management*. <https://doi.org/10.1108/IMEFM-11-2023-0422>
- Mohd Zain, F. A., Wan Abdullah, W. A., & Muhamad, S. F. (2025). Governance mechanisms and Islamic bank performance: insights from South East Asia and the Gulf Cooperation Council. *Management & Accounting Review (MAR)*, 24(1), 57-97. <https://doi.org/10.24191/MAR.V24i01-03>
- Mollah, S., & Zaman, M. (2015). Shari'ah supervision, corporate governance and performance: Conventional vs. Islamic banks. *Journal of Banking & Finance*. <https://doi.org/10.1016/j.jbankfin.2015.04.030>
- Nawaz, T., Haniffa, R., & Hudaib, M. (2020). On intellectual capital efficiency and Shariah governance in Islamic banking business model. *International Journal of Finance & Economics*. <https://doi.org/10.1002/ijfe.1986>

- Nipa, N. N., Zahid, Z., Amin, M. R., Alamm, M. S., Haque, Z. M. E., & Parves, M. M. (2026). Harnessing Islamic FinTech for disaster risk financing: Innovative strategies for economic resilience and sustainable development. *Journal of Islamic Economics Lariba*, 12(1). <https://doi.org/10.20885/jielariba.vol12.iss1.art9>
- Odedina, E. A. (2023). Redefining governance, risk, and compliance (GRC) in the digital age: integrating AI-Driven risk management frameworks. *World Journal of Advanced Engineering Technology and Sciences*, 10(1), 264-282. <https://doi.org/10.30574/wjaets.2023.10.1.0257>
- Safiullah, M., & Shamsuddin, A. (2018). Risk in Islamic banking and corporate governance. *Pacific-Basin Finance Journal*. <https://doi.org/10.1016/j.pacfin.2017.12.008>
- Sufyan, A., & Othman, S. (2025). Governance, Ethics, and Transparency: A Comparative Analysis of Takaful and Conventional Insurance in Malaysia. *Journal of Business and Economic Options*, 8(3), 13-23. <https://doi.org/10.5281/zenodo.17338416>
- Sunkara, V. L. B. (2024). Integrating product management strategies into risk management frameworks: Enhancing banking resilience in the era of fintech and regulatory evolution. *International Research Journal of Modernization in Engineering Technology and Science*, 6. <https://doi.org/10.2139/ssrn.5074168>
- Tabash, M. I., Alam, M. K., & Rahman, M. M. (2022). Ethical legitimacy of Islamic banks and Shariah governance: evidence from Bangladesh. *Journal of Public Affairs*, 22(2), e2487. <https://doi.org/10.1002/pa.2487>
- Udoh, O. R. (2024). Enhancing internal audit efficiency for effective risk management and corporate governance frameworks. *International Journal of Research Publication and Reviews*, 5(12), 3646-3659. <https://doi.org/10.55248/gengpi.5.1224.250122>
- Wasim, M. H., & Zafar, M. B. (2023). Shariah governance framework for Islamic banking in Pakistan: A critical review and comparison with AAOIFI. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-03-2023-0101>
- Yu, Z., & Liu, J. (2025). The digital revolution in banking: Unpacking risk management in the age of transformation. *International Review of Economics & Finance*. <https://doi.org/10.1016/j.iref.2025.104444>