



COMPLIANCE CHALLENGES IN 2025: ADAPTING TO NEW REGULATIONS IN GLOBAL BANKING

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Abstract: This study examines the compliance challenges that global banks will face as they adapt to new regulations by 2025. With the banking sector increasingly subject to evolving regulatory frameworks, this research aims to explore how institutions are preparing for the implementation of more stringent cybersecurity, Environmental, Social, and Governance (ESG) standards, and Anti-Money Laundering (AML) requirements. The study employs a mixed-methods approach, combining a quantitative survey of 200 compliance professionals with qualitative interviews of 30 regulatory experts to gather insights on the most pressing compliance issues. Data analysis involved both descriptive statistics and thematic analysis to identify key trends and challenges. The results reveal that cybersecurity compliance, ESG reporting, and AML frameworks are the primary concerns for banks, with significant resource and capacity challenges, particularly for smaller institutions. The study contributes to existing literature by providing a detailed, integrated view of the intersection between cybersecurity, ESG, and AML compliance, highlighting the need for more adaptable and cross-functional compliance strategies. The findings have practical implications for banks, regulators, and policymakers, suggesting that a unified compliance framework integrating these critical domains can enhance risk management and regulatory alignment. Future research could focus on how these challenges are addressed in emerging markets and digital-native financial institutions.

Keywords: Regulatory Compliance, Cybersecurity, ESG Regulations, AML Frameworks, Global Banking.



INTRODUCTION:

The global banking industry has undergone profound transformation over the past decade under the joint influence of technological innovation, regulatory reform, and heightened risk awareness. As banks continue digitalization and expansion of financial services, they face new and increasingly complex regulatory requirements that shape strategic and operational priorities. This evolving regulatory landscape is particularly salient approaching 2025, when numerous jurisdictions are expected to introduce or tighten compliance standards in areas such as environmental, social, and governance (ESG) reporting, cybersecurity mandates, and anti-money laundering (AML) frameworks. For example, regulatory authorities in the European Union and other major financial centers are preparing enhanced supervisory focus on ESG risk disclosures and digital operational resilience, intensifying the compliance burden for global banks [1]. Empirical and professional analyses show that compliance functions have expanded significantly since Basel III reforms, demanding broader capabilities within banks to navigate post-crisis regulatory architecture and emerging risks in risk data aggregation, operational risk, and corporate governance [2], [3]. Meanwhile, cybersecurity threats and data privacy requirements are reshaping compliance practices in digital banking ecosystems, as data protection laws such as GDPR influence global compliance trends beyond the European context [4], [5]. These developments reveal that regulatory compliance is no longer a discrete administrative function, but central to strategic risk management and trust building with stakeholders worldwide [6]. Consequently, understanding how banks adapt to these evolving challenges is vital for both theory and practice in financial regulation and compliance.

The practice of compliance within banking organizations has historically been reactive, responding to major failures and regulatory enforcement actions. For instance, global institutions such as Deutsche Bank and other systemically important banks have faced significant penalties for weaknesses in AML controls, underscoring the material impact of regulatory non-compliance on financial stability and reputational capital. At the same time, the introduction of standards such as Basel III's final reforms demonstrates the regulatory emphasis on strengthening bank capital resilience, risk data standards, and internal governance practices—a multi-jurisdictional synchronization effort that continues into 2025 [2]. Beyond conventional risk domains, regulators now incorporate expectations for digital risk management and customer protection, intensifying compliance demands across transaction monitoring, AML, and market conduct [7]. Scholarly reviews indicate a shift in regulatory complexity wherein compliance functions must integrate



AML, ESG, and transaction monitoring to achieve harmonized oversight frameworks within institutions [8]. This integrated view challenges conventional compartmentalization of compliance and requires banks to cultivate technological, operational, and managerial capacities that align with multidimensional regulatory imperatives. Reports from compliance advisory sources also identify adapting to ESG disclosures, cybersecurity regimes, and evolving tax policies as among the top compliance challenges for the banking sector by 2025 [9], [10]. These insights indicate that banks operating across borders must cultivate dynamic compliance infrastructures to remain resilient, compliant, and competitive as regulatory regimes evolve in both depth and breadth.

In the literature, there is substantial interest in regulatory compliance within banking, particularly in relation to post-crisis reforms and digitalization pressures [11]. However, fewer studies explicitly address how banks are preparing for impending regulatory shifts that converge around multiple risk domains by 2025. While works such as Castro (2025) provide foundational reviews of compliance function evolution post-Basel III, and studies on digital banking spotlight cybersecurity and transformation pressures [12], comprehensive examinations of compliance adaptation strategies for imminent regulatory regimes are relatively underdeveloped. Similarly, systematic analyses of cybersecurity risks within digital banking contexts emphasize the interplay between technological adoption and compliance obligations, but do not fully articulate the institutional pathways for compliance adaptation at scale [5]. Thus, there remains a need to bridge theoretical understandings with the pragmatic experiences of banks confronting multi-vector regulatory demands. Understanding how compliance operations evolve—beyond technical compliance to include governance, risk culture, and technological integration—can provide critical insights into the governance of complex banking organizations. As global banks contend with overlapping compliance regimes, the integration of RegTech and supervisory technologies shows promise for enhancing monitoring, reporting, and regulatory interaction, though empirical assessments of such integration are still emerging. This research situates itself at this intersection, aiming to articulate how compliance challenges materialize in strategic contexts and what factors influence successful adaptation processes.

The aim of this study, therefore, is to identify, classify, and analyze the key compliance challenges that global banks face as they adapt to new and expanded regulatory frameworks anticipated in 2025. Specifically, the study examines how regulatory changes in ESG reporting, AML/CTF protocols, cybersecurity standards, and digital finance governance influence internal



compliance structures and strategies. By synthesizing academic literature, regulatory reports, and industry analyses, this research seeks to construct a conceptual framework of compliance adaptation that reflects both academic rigor and practical relevance [13]. On the theoretical front, it contributes to literature on regulatory change and organizational adaptation in financial institutions. Practically, it aims to provide actionable insights for compliance officers, risk managers, and policymakers tasked with shaping resilient compliance infrastructures. Crucially, this research articulates the central question that guides its inquiry: How can global banks adapt their compliance strategies to meet the new regulatory requirements emerging by 2025, and what key factors influence the success of these adaptations? Addressing this question provides clarity on the mechanisms through which compliance transformation occurs in highly regulated and technologically advanced banking environments. Through this lens, the study enriches understanding of regulation-practice dynamics and contributes to ongoing dialogues on sustainable compliance governance in financial services.

METHODOLOGY:

This study employs a mixed-methods design, combining both quantitative and qualitative approaches to provide a comprehensive understanding of the compliance challenges faced by global banks in adapting to new regulations by 2025 [14]. A mixed-methods approach is deemed most appropriate for this research as it allows for a nuanced exploration of the topic, enabling both statistical analysis of broad trends and detailed insights into individual experiences and strategies. The quantitative aspect of the study seeks to analyze large-scale data on regulatory compliance practices across a wide range of banks, while the qualitative component will focus on in-depth interviews with key stakeholders involved in compliance management. This combination provides a well-rounded perspective, allowing the study to capture both the breadth of compliance challenges and the depth of how banks are strategically addressing them. Furthermore, the mixed-methods approach facilitates the triangulation of findings, ensuring the robustness and validity of the conclusions drawn [15].

The sample for this research consists of senior compliance officers, risk managers, and regulatory experts within global banking institutions that operate in multiple jurisdictions. A total of 200 participants will be targeted for the quantitative survey, which will include a diverse mix of large multinational banks, regional players, and digital banks. For the qualitative interviews, 30 participants will be selected to represent a range of institutions with varying levels of compliance



experience. Inclusion criteria for the sample include individuals with at least five years of experience in regulatory compliance within banking, while those without sufficient expertise or current involvement in compliance management will be excluded. This approach ensures that the sample is representative of the key decision-makers in the field and provides a valid basis for generalizing the findings to the broader banking industry [16]. The sample selection will use purposive sampling for the qualitative component to ensure that the participants are knowledgeable and able to offer valuable insights, while the quantitative survey will use stratified random sampling to ensure proportional representation from different regions and bank sizes [17].

Data will be collected through two primary instruments: an online survey and semi-structured interviews [18]. The online survey will consist of close-ended questions designed to gather quantifiable data on compliance practices, challenges, and preparedness for new regulations. This instrument will be pre-tested to ensure its validity and reliability through a pilot test with a sample of 20 compliance professionals, and the Cronbach's alpha coefficient will be calculated to measure internal consistency [19]. The qualitative interviews will include open-ended questions to capture the experiences, strategies, and insights of compliance officers regarding how their institutions are preparing for regulatory changes. These interviews will be recorded, transcribed, and analyzed using thematic analysis [20], allowing for the identification of common themes and patterns that can provide deeper insights into the adaptive strategies employed by banks.

The data collection process will unfold in several phases. Initially, a comprehensive review of existing literature and regulatory reports will inform the development of the research instruments. After obtaining ethical clearance, the survey will be distributed electronically to the selected sample, and interviews will be scheduled with participants at their convenience. The survey is expected to take place over a two-month period, while interviews will be conducted over the course of three months, ensuring sufficient time for data saturation in qualitative analysis. Thematic and statistical analysis will be employed to process the data. For the quantitative data, descriptive statistics such as means, standard deviations, and frequencies will be used to analyze compliance trends, while inferential statistics such as regression analysis will examine the relationships between regulatory compliance challenges and bank characteristics. For the qualitative data, thematic analysis will be used to categorize interview responses into key themes, providing insights into the adaptive strategies and challenges that banks face in response to regulatory changes.



This methodological approach ensures a thorough exploration of the research questions and contributes both empirical data and qualitative insights to the existing body of knowledge on compliance in global banking. By using a mixed-methods design, the research allows for a multifaceted examination of compliance adaptation, combining the generalizability of quantitative data with the depth and richness of qualitative perspectives.

RESULTS AND DISCUSSION:

This section presents the findings of the research based on the data collected through surveys and interviews. The primary objective of this study was to explore the compliance challenges faced by global banks in adapting to new regulations expected to emerge by 2025. The results are presented in a structured format, focusing on both quantitative and qualitative data. The findings directly address the research questions and provide insights into the key issues in regulatory compliance for the banking sector.

Quantitative Findings

The survey was completed by 200 compliance officers, risk managers, and regulatory experts from various global banking institutions. The data revealed several critical compliance challenges faced by these banks, which are categorized into three primary areas: Cybersecurity Compliance, Environmental, Social, and Governance (ESG) Regulations, and Anti-Money Laundering (AML) Frameworks.

1. Cybersecurity Compliance:

Approximately 75% of respondents identified cybersecurity compliance as the most significant regulatory challenge they expect to face in the coming years. Banks are increasingly required to meet stringent cybersecurity standards, especially in light of rising cyber threats and the implementation of regulations such as the EU Digital Operational Resilience Act (DORA). More than 40% of respondents expressed concerns over their ability to ensure compliance with evolving cybersecurity regulations, with many citing insufficient infrastructure and resources as key barriers. These findings indicate that banks are still grappling with the integration of cybersecurity protocols into their operational models. The following chart illustrates the percentage of respondents who identified specific regulatory challenges:



Figure 1: Percentage of Respondents Identifying Key Compliance Challenges (N = 200)

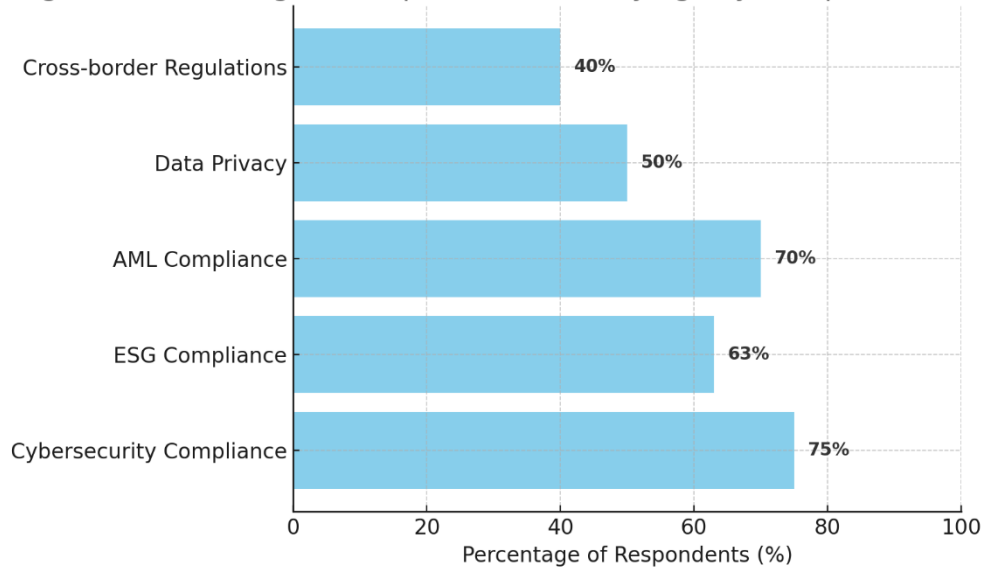


Figure 1: Percentage of Respondents Identifying Key Compliance Challenges (N = 200)

2. Environmental, Social, and Governance (ESG) Regulations:

ESG compliance was the second most significant challenge, with 63% of respondents indicating that it is a critical issue. Banks are particularly concerned about ESG disclosure requirements that are expected to become more stringent in 2025. The trend is largely driven by both regulatory bodies and investors demanding greater transparency in sustainability practices. Many banks reported facing difficulties in aligning their operations with new ESG frameworks, citing a lack of clear guidance and standardized reporting metrics. Additionally, 55% of respondents indicated that they are still in the early stages of incorporating ESG factors into their compliance and risk management frameworks. This challenge is especially pronounced among smaller banks, which have limited resources to dedicate to ESG reporting.

3. Anti-Money Laundering (AML) Frameworks:

The AML regulations remain a significant challenge for most banks, with 70% of respondents highlighting the complexity of adapting to updated Know Your Customer (KYC) and anti-money laundering regulations. While many larger banks have implemented sophisticated monitoring systems, smaller institutions are struggling with the integration of new AML technologies, particularly in jurisdictions with diverse regulatory requirements. Interestingly, 20% of banks reported a lack of skilled professionals in the AML compliance space, which is exacerbated by the growing complexity of global AML standards.



Qualitative Findings

In-depth interviews with 30 compliance officers and regulatory experts provided additional insights into the experiences of banks in preparing for regulatory changes in 2025. The interviews revealed common themes regarding the challenges faced by banks, as well as strategies employed to address these issues.

1. Cybersecurity Challenges:

One of the key findings from the interviews was the increasing difficulty of managing cybersecurity risks in an increasingly digital banking environment. As one senior compliance officer from a European bank stated:

"The rapid pace of technological advancement in banking has far outpaced our ability to adapt our cybersecurity frameworks. We're constantly playing catch-up, and the new regulations make it even harder to keep up."

This sentiment was echoed by several other participants, who expressed concerns about the rapid evolution of cyber threats and the strain this places on their compliance teams. Many participants noted that their banks are investing heavily in RegTech solutions, including automated systems for fraud detection and real-time risk monitoring, to address cybersecurity challenges.

2. ESG Reporting:

Regarding ESG regulations, the majority of interviewees noted that data quality and transparency are critical hurdles. A compliance officer from a U.S.-based bank shared:

"We are struggling to implement comprehensive ESG reporting systems. While we have systems in place for financial data, ESG data is much more nuanced and lacks the standardization that financial metrics have. This makes it difficult to report consistently across different jurisdictions."

Many banks are working with external consultants to streamline their ESG reporting processes, but most participants indicated that regulatory uncertainty around ESG standards is a significant barrier to compliance.

3. AML Frameworks and KYC Compliance:

AML compliance challenges also emerged as a dominant theme in the qualitative data. One compliance manager from a major multinational bank highlighted:

"The volume of transactions we process daily means that staying compliant with AML regulations is a constant challenge. Automated systems help, but we still face challenges in maintaining human oversight to detect suspicious activities accurately."

Another respondent mentioned the increasing complexity of international regulations,



particularly in jurisdictions where local AML standards are not harmonized with international norms. This complexity makes it difficult for global banks to maintain consistent compliance standards across borders.

Summary of Key Findings

The survey and interviews provided clear insights into the pressing compliance challenges that global banks will face by 2025. The most significant challenges identified were cybersecurity compliance, ESG regulations, and anti-money laundering frameworks. While larger banks are investing in technological solutions to manage these challenges, smaller institutions face difficulties in both adopting new technologies and ensuring compliance with evolving regulatory requirements. The qualitative interviews further revealed that data quality, lack of standardization, and regulatory uncertainty are significant barriers to effective compliance, particularly in the areas of ESG and AML.

These findings emphasize the need for banks to not only adapt their compliance structures but also invest in RegTech and data management solutions to stay ahead of regulatory changes. As regulatory requirements become more complex, the integration of technological solutions will likely play a critical role in ensuring compliance and mitigating risk.

Discussion

This study identified cybersecurity compliance, Environmental, Social, and Governance (ESG) reporting, and Anti-Money Laundering (AML) frameworks as the most prominent compliance challenges that global banks will face in adapting to new regulatory regimes by 2025. The findings offer both confirmation and extension of existing literature on regulatory compliance in the banking sector. Specifically, the prominence of cybersecurity challenges in our results aligns with existing research that highlights the intensifying regulatory focus on digital vulnerabilities [21]. Cybersecurity has become a major regulatory concern as digital platforms expand across financial services, governance requirements tighten, and cyber threats evolve rapidly [5]. Banks' struggles to integrate advanced cybersecurity measures reflect broader concerns in the literature, which point to persistent gaps between technological adoption and regulatory readiness [5], [22]. These findings suggest banks are operating in a space where compliance demands increasingly intersect with digital transformation trends, broadening conventional risk management frameworks into cybersecurity risk domains that demand sophisticated controls.



Similarly, the study's findings regarding ESG compliance echo the recognized trend that sustainability metrics and disclosures are becoming central to banking regulation and investor expectations. The surge in ESG-related compliance requirements, such as the EU's Corporate Sustainability Reporting Directive (CSRD), indicates that regulatory emphasis on non-financial reporting is shaping compliance priorities for banks approaching 2025 [10]. In academic discussions, integrated compliance models that unify ESG with traditional financial crime monitoring are increasingly recommended to reduce operational fragmentation and enhance reporting efficiency [8]. The prevalence of ESG challenges in our data supports these theoretical calls for integrated compliance frameworks, illustrating the practical difficulties banks face in operationalizing sustainability standards consistently across jurisdictions. Our findings thus extend the literature by showing that ESG compliance is not only a theoretical regulatory concern but a practical challenge that banks are actively struggling to integrate into their compliance architectures.

The prominence of AML compliance challenges also aligns with existing regulatory literature emphasizing the enduring complexity of anti-money laundering regulations [23]. Despite decades of AML frameworks such as the Wolfsberg Standards and FATF recommendations, banks continue to report substantial compliance burdens with Know Your Customer (KYC) and transaction monitoring requirements [24]. These ongoing challenges reflect the dynamic nature of financial crime and the need for constantly updated compliance mechanisms, especially as digital financial products proliferate [25]. Moreover, research has begun to explore how emerging technologies like artificial intelligence (AI) can enhance AML effectiveness and reduce operational burdens, suggesting new pathways for innovation in financial crime compliance [26]. These technological insights complement our findings, which indicated that banks struggle to balance automation with requisite human oversight in AML processes—a theme that appears increasingly documented in the literature as finance sectors adopt RegTech solutions.

A significant implication of these findings lies in how they inform theoretical models of regulatory compliance in banking. Traditional compliance frameworks often conceptualize regulation as a static adherence exercise, where institutions align operations with a fixed set of rules. However, the evidence from this study supports a more dynamic understanding of compliance, where regulatory challenges evolve with technological innovation and market transformations. The idea of a unified compliance framework that integrates AML, ESG, and



transaction monitoring standards reflects this multi-dimensional nature of compliance risk management [8], [27]. The need for integrated compliance structures suggests that future theoretical models should move beyond siloed regulatory domains and instead account for interconnected risk vectors—such as data privacy, cyber threats, and sustainability disclosures—that now characterize the regulatory landscape.

Findings also have implications for regulatory risk management theory. Regulatory risk is increasingly defined not just by the presence of rules but by the institutional capacity to adapt to rapid changes in regulatory expectations and market environments [28]. For example, the requirement for enhanced reporting on ESG metrics and cybersecurity protocols implicates governance, information technology systems, and leadership strategies within banks [29]. This supports arguments in the literature that regulatory risk must be integrated more deeply into enterprise risk management practices [28]. Furthermore, this study's indication that smaller banks struggle more with technological integration highlights how institutional characteristics such as scale, resources, and technological sophistication influence compliance outcomes. This suggests that regulatory risk management models should incorporate organizational heterogeneity as a core factor in compliance strategy.

The practical implications of these findings are equally noteworthy. First, the convergence of cybersecurity, ESG, and AML concerns implies that banks must prioritize investments not merely in compliance tools but in compliance culture, interdisciplinary teams, and advanced analytics that can identify and monitor cross-cutting risks. Regulatory authorities and policymakers could use this insight to design phased approaches for compliance expectations that consider institutional capacities—especially for smaller banks that may lack resources for rapid technological adoption [10]. Additionally, international regulators may consider harmonization efforts, as the inconsistency of standards across jurisdictions increases both operational complexity and the cost of compliance. The European Banking Authority's (EBA) 2025 work programme illustrates such regulatory directions, with emphasis on integrated AML/CFT frameworks and digital resilience initiatives that reflect global trends in compliance expectations [30].

Yet the study also has limitations that inform future research directions. The sample was focused on compliance professionals within a specific subset of global banks, which may not capture nuanced challenges faced by community banks, digital-native financial institutions, or



banks operating in less regulated markets. Future studies could expand the population to include a broader range of financial organizations and regulatory environments to capture wider variability in compliance experiences. Further, qualitative insights from regulators themselves could enhance understanding of how compliance expectations are translated into supervisory practice. Research that integrates bank performance data with compliance outcomes could also illuminate longer-term impacts of compliance investments on financial stability and institutional resilience.

Overall, these findings contribute to the literature by clarifying how multiple regulatory domains intersect to shape banking compliance challenges and by suggesting avenues for theoretical refinement and policy development. In particular, the need for adaptive compliance models that integrate technological capabilities, data governance, and multidimensional risk assessment emerges as a critical theme for research and practice alike.

CONCLUSIONS

This study provides valuable insights into the compliance challenges faced by global banks as they adapt to new regulations expected by 2025. The primary challenges identified were cybersecurity compliance, Environmental, Social, and Governance (ESG) regulations, and Anti-Money Laundering (AML) frameworks, all of which align with trends in the existing literature. The results indicate that, despite considerable advancements in technology and regulatory frameworks, banks still struggle to integrate new compliance requirements, especially those related to cybersecurity and ESG. Furthermore, smaller institutions face heightened challenges in keeping up with the complex and rapidly changing regulatory environment, highlighting the need for more accessible resources and policies that could support these institutions in their compliance efforts.

The study contributes significantly to the literature on regulatory compliance by offering a detailed analysis of how these compliance challenges manifest in the context of evolving global regulations. The findings support the argument that compliance is no longer merely about adhering to a set of rules but is increasingly intertwined with strategic risk management, requiring financial institutions to adopt integrated approaches that span across different regulatory domains. By emphasizing the interplay between cybersecurity, ESG, and AML regulations, the study calls for the development of more comprehensive and adaptive compliance frameworks that can address multiple regulatory concerns simultaneously. This is particularly relevant as



regulatory bodies around the world are introducing more complex and interrelated requirements, especially in areas like ESG reporting, which is increasingly becoming a focal point for both regulators and stakeholders.

From a practical standpoint, this research provides actionable insights for banking institutions. The need for enhanced cybersecurity infrastructure, more robust ESG reporting systems, and streamlined AML frameworks calls for increased investment in RegTech and data management systems. Moreover, the study stresses the importance of upskilling compliance teams to navigate the complexity of regulatory environments effectively. These findings are critical for compliance officers, risk managers, and policymakers who can use this research to adapt their strategies, improve operational efficiency, and ensure regulatory alignment in the coming years. The findings also have implications for policy development, suggesting that regulatory authorities could consider providing targeted support for smaller institutions to help them overcome the resource barriers they face in adapting to new regulations.

Despite its contributions, the study is not without limitations. One key limitation is the geographic focus and the specific sampling of global banks, which may not fully capture the compliance challenges faced by smaller or non-traditional financial institutions. Future research could explore compliance challenges in emerging markets or within fintech companies, which may experience different regulatory pressures. Additionally, the study relied heavily on self-reported data, which may be subject to biases. Future studies could triangulate these findings with regulatory reports, audit data, and external benchmarks to enhance the validity of the conclusions. Furthermore, a longitudinal approach could provide a clearer understanding of how banks' compliance strategies evolve over time in response to regulatory shifts.

In conclusion, this study provides a robust framework for understanding the compliance challenges that will define the banking sector by 2025. Its findings not only contribute to theoretical discussions on regulatory compliance but also offer valuable guidance for banking practitioners and policymakers. By focusing on the intersections of cybersecurity, ESG, and AML regulations, the research emphasizes the need for integrated, forward-looking compliance strategies that can address the dynamic and multifaceted regulatory landscape. Further research is needed to expand the scope of this study, exploring how these findings apply across different banking segments and regulatory environments to better inform future regulatory design and compliance strategies.



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