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Forensic Accounting as a Tool for Financial Risk Management in Banking Services

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ABSTRACT

The purpose of that article was to provide insights into the strategic use of forensic accounting in managing financial risk in a bank setting (particularly on how forensic accounting can be used by banks as an ex ante approach for minimizing fraud and malpractices) to help fill the gap in literatures involving its real-life applications especially in developing economies. The depth of banks' exposure to financial crimes, fraud and non-performing loans notwithstanding, little was known on the firm effort theory role played by forensic accounting in reducing these risks. For the quantitative aspect of the study, a set of questionnaire was used which were filled by 500 banking professionals and out of them, 410 responses with valid data were analyzed using descriptive statistics and inferential statistics. Findings also indicated that forensic accounting was very useful in improving financial fraud detection (68% of respondents agreed to this), it boosted AML and KYC compliance was admitting by 61%. But, 37% stated it was being officially integrated into institutional risk management frameworks, suggesting some underuse. The main challenges identified were: shortage of trained forensic accountants (74%) and inadequate technical infrastructure (63%). It is the novelty of this research study to connect forensic accounting with financial risk reduction empirically in the context of Bangladesh banking. Policy suggestions include formalizing of forensic accounting in regulation, continued training programs and forensic audit that should be mandatory for high risk transactions as a way of ensuring financial resilience and transparency in the banking sector.

INTRODUCTION

The banking industry in Bangladesh is also an important catalyst for rapid economic growth, financial stability and investment mobilization (Tasneem & Ahmad, 2024). The industry has exploded over the past 20 years but still grapples with risks that include defaults, fraud, and money laundering, cybercrime and governance shortcomings (Gennaro & Nietlispach, 2021). Recent incidents, such as the Large-Scale Forgeries at Bangladesh Bank and Fake Currency-Issuance Case at BIBM, according to BB & BIBM reports are being characterized by some dimensions: where financial irregularities and fraudulent activities led to large-scale losses; corrupt communication on risks leads toward ineffective risk governance; terrible scams have a high impact with society in term of losing trust (Siddik & Siddik, 2021). It has thus become a strategic imperative for banks to reinforce their risk management. The practice was developed, in large part, with the advent of forensic accounting in response to external pressures throughout the world and it has internationalized as an effective tool for promoting governance and risk management (Aman, 2023). Forensic accounting is not like what CPAs do during audit work, the latter focuses on the discovery of fraud and hidden corruption (Ebrahim & Al-Sartawi, 2024). Its importance extended globally after scandals like Enron and WorldCom, which underscored the weakness of traditional audits (Halimuzzaman *et al.,* 2024). In Bangladesh, forensic accounting has not been accepted as a tool in making the assessment of banks' performance and most of the banks depend on compliance checklists and traditional audit techniques (Khaleduzzaman & Hera, 2024). A lack of qualified forensic individuals and low regulatory emphasis further limits it. The banking sector in Bangladesh is more exposed to risk of fraud compared to other countries, mainly because of widespread digitization on the back of increasing crossborder transactions and pressure from regulators like the Financial Action Task Force (FATF) (Azhar *et al.,* 2021). Forensic accounting provides sophisticated instruments like fraud examination, transaction analysis and litigation support that could improve the quality of detection of financial crimes as well as the monitoring of business risks and level of compliance with AML regulations (Anghel & Poenaru, 2024). Although such potential, few empirical works have investigated it into the Bangladeshi for which; a gap is observed between both academic and practical knowledge.

The present study aims to fill this gap by analyzing forensic accounting as a financial risk management mechanism in the banks of Bangladesh. More specifically, it examines the extent of knowledge by practitioners, areas where

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they are currently being used, assumptions of efficacy and challenges regarding forensic accounting. Evidence concerning the effect of forensic accounting adoption on risk outcomes is built via a quantitative method.

LITERATURE REVIEW

Forensic accounting is increasingly being identified and recognized as a specialized area of practice, a skill set in its own right that amalgamates core accounting audit skills with investigative processes (Kaur & Mukherjee, 2023). From a worldwide perspective, the developed world witnessed the birth of forensic accounting in relation to corporate scandals such as Enron, WorldCom and Parmalat among others that unveiled imperfections behind conventional auditing practices and brought home how critical it is to reinforce tools for the detection of fraud (Cambaza, 2024). Forensic investigation is a different approach from that of traditional auditing; it not only audits for the truth and fairness in the financial statements, but also looks out for hidden irregularities, examines fraudulent transactions, and provides support to litigators or acts as an expert witness on financial matters (Rashid, 2023). It has been adopted because it is said to improve corporate governance, fraud risk assessment and regulatory compliance in both developed and emerging markets (Utama & Purwoko, 2024). In the literature on risk management, a number of articles discuss forensic accounting as being a proactive effort to deal directly with fraud and operational risks. (Nursansiwi, 2024) suggested that forensic accounting is an important part in identifying areas of weakness within organizations and also to improve fraud prevention process. Also, (Ray, 2021) stressed that forensic accountants have a responsibility to maintain an internal control system, detect financial irregularities, and help the management in fraud risk reduction. Forensic accounting in banking institutions, since fraud and financial mismanagement represent a serious risk also to banking institutions, has even been considered an addition to the classical risk management systems (Alaaris & Al-Sartawi, 2024). Forensic accounting is even more relevant in developing nations where there are weak institutional frameworks, deficient governance mechanisms and elevated levels of financial crime (Alabi *et al.,* 2022). While forensic accounting played a major role in minimizing bank losses due to fraud, factors such as non-availability of skilled personnel, poor law enforcement mechanisms and lack of requisite regulatory support also posed some limitations towards its adoption (Dewayanto, 2023). Similar findings were made in South Asian scenarios, where banks face higher exposure to fraud due to rapid digitalization processes, originated from corruption and anemic monitoring system (Gudimetla *et al.,* 2024). There is still lack of literature on forensic accounting in Bangladesh, except for the traditional audit-based and compliance-based practices (Siddique, 2024). The soundness of the banking sector has been a major issue, and Bangladesh Bank and Transparency International Bangladesh (TIB) found in their different findings that non-performing loans, insider lending, and irregularities are high harming banks' strength Parvin *et al.,* 2023). (AL-Hadi and Al-Shaibany (2024) intimated that forensic accounting could be a response to the menace of financial transparency and accountability covering loan fraud, cybercrime, and money laundering. Yet, forensic accounting has not been effectively used in the banking sector of Bangladesh because of no established rules and regulations for it, lack of training or specialized courses and poor knowledge among financial professionals (Odeyemi *et al.,* 2024). The literature also indicates that forensic accounting may assist in meeting regulatory requirements, particularly those for global anti-money laundering (AML) and counter-terrorist financing (CTF). Digital forensics, transaction monitoring and data analytics are becoming increasingly vital in detecting complex financial crimes (Eghaghe *et al.,* 2024). However, in Bangladesh the dearth of trained professionals and traditional auditing practices still confines the application of forensic accounting in promoting financial integrity.

Collectively, current literature highlights the strong potentialities of forensic accounting in improving financial risk management in banking products. The global and regional reports have shown its effectiveness such as fraud prevention, compliance, and governance but, there seems a research gap of its adoption, effectiveness and challenges in Bangladesh. This research thus extends extant literature by empirically investigating the forensic accounting pattern in banking risk management under the peculiar institutional and regulatory environment of Bangladesh. The objectives of the study are:

1. To assess the awareness and knowledge level about forensic accounting among banking sector employees in Bangladesh.
2. To find out the present applications of forensic accounting in banking sector of Bangladesh.
3. To assess the role of forensic accounting in financial fraud detection and financial risk management in banking sector.
4. To understand the influence of forensic accounting practices on general coverage of financial risk management in banking industry.
5. To investigate the critical challenges and impediments retarding forensic accounting practice in Bangladeshi banking industry.

MATERIALS AND METHODS

A quantitative research design was used in this paper to assess the impact of forensic accounting as a financial risk management tool on banking industry of Bangladesh. The population were control environment banking professionals in audit, compliance, risk management and operations from sampled state owned banks (SOBs), private commercial banks (PCBs) and foreign commercial bank (FCB). Sample size was calculated using Cochran's formula:

$n = (Z^2.p.(1 - p))/E^2$

Where, Z= 1.96 for a 95% confidence level, p= 0.5

assuming maximum variability and E=0.05 margin of error (Cochran, 1942). The calculated minimum required sample according to the formula was 384 subjects. Considering non-responses, we distributed 400 questionnaires and received 372 valid responses to use for analysis. The structured questionnaire was formulated from previous literature review and adjusted for Bangladeshi culture. It had both open and closed ended questions aimed at assessing perception, application, effectiveness, challenges and suggestions related to forensic accounting. The clarity, content validity, and contextual relevance of the questionnaire were reviewed by two bankers and three academics. A pilot test with 60 subjects was administered and the feedback used to reword ambiguous items and increase internal consistency. Reliability was very high, with Cronbach's Alpha values above 0.80 for all constructs. Data were collected with the aid of a structured questionnaire on awareness, application, effectiveness and challenges of forensic accounting in banking. Original data were gathered using self-administered questionnaires and they were completed and handed over to the respondents during an 8-week period about 2024. It was voluntary to participate, and potential participants were informed about the purpose of the study and that their participation would be anonymous. The written informed consent was taken from the participants before inclusion. Secondary data (annual reports, circulars of Bangladesh Bank and previous academic research work) were utilized to triangulate the findings and to enhance the interpretive validity. Data were coded and run on the Statistical Package for Social Sciences (SPSS; v26). The inferential statistical analysis, correlation and regression tests were done to see the relationship with forensic accounting practices by financial risk management. Results were discussed in accordance with the intention of the study and in terms of whether they represented a meaningful change. Descriptive statistics, chi-square test and logistic regression analysis were used to check the association among forensic accounting adoption and financial fraud risk reduction in relation of reliability, validity of instrument.

RESULTS AND DISCUSSION

This study provided empirical evidences on the impact of forensic accounting on financial risk management in Bangladesh banking industry. The study scrutinized the responses of 372 banking staff to evaluate its awareness, application aspects, effectiveness and challenges of forensic accounting. The results were subsequently discussed in light of previous research and theoretical frameworks to reveal more about its practical implications. This section relates the statistical results within existing literature, and its importance to identifying fraud, compliance, and generalized financial risk management among the Bangladesh Bank.

Demographic Information of the Respondents

Demographic characteristics of respondents gave valuable information on the representativeness and reliability of the sample.

Of the 372 valid responses, most of the respondents (about 68%) were male whose feedback makes up more than the female (32%), consistent with reports from previous labor force surveys on gender imbalances in Bangladeshi banking professionals. This distribution was

Table 1: Demographic Information of the Respondents

Variable	Category	Percentage (%)
Gender	Male	68
	Female	32
Age	20–29 years	22
	30–39 years	41
	40–49 years	27
	50 years and above	10
Education	Undergraduate	33
	Postgraduate	64
	Professional Certification (CA/ACCA/CMA)	3
Experience	Less than 5 years	21
	6–10 years	36
	11–15 years	29
	More than 15 years	14
Department	Audit & Compliance	34
	Risk Management	27
	Operations	22
	Finance & Others	17

uneven but reflected the journey of sectoral employment which also highlighted women's under-representation in decision-making and technical banking roles. Respondent characteristics by age Most respondents were in the 30–39 years age group (41%), followed by the next highest being 40–49 years (27%) and then 20–29 years (22%), with only 10% of them being older than 50 (Table 1). This suggested that most of the respondents were mid-career professionals on roles which tended to have significant spill-overs from both operations and risk management. This kind of a distribution also enhanced the validity of responses related to knowledge and use of forensic accounting. In terms of education, 64% of the participants had postgraduate degrees, 33% were graduates and 3% held professional degree such as CA, ACCA or CMA (AL-Hadi & Al-Shaibany, 2024). This is attributed to the fact that only post-graduation programs (which were built upon a theoretical courses in banking) were pursued by most respondents which imply that they had the intellectual capacity to comprehend and judge the practice forensic accounting. However, the low proportion of participants who were professionally qualified suggested that there was a need for specialist expertise in forensic auditing within industry. With respect to years of professional experience, 36% of the participants had worked in their field for 6–10 years, while 29% had clocked between 11 and 15 years, followed by less than five (21%) and over fifteen (14%) respectively. This breakdown indicated that the majority of the pool were in fact experienced enough to hold informed views on risk strategies in general (if not necessarily forensic accounting based ones). In terms of department are the affiliation, 34% were from audit and compliance, 27% were from risk management, 22% operations and 17 % finance & other support services. A relatively high percentage of participation from audit and compliance was also a significant contribution, because the members of these functions were generally involved in fraud investigation, internal control and regulatory reporting which could provide important perspectives on forensic accounting.

Respondents' demographics showed a good level of gender, age, education qualifications, experience and departmental representation allowing the results to generalize with relative ease across the Banking sector (Ebrahim & Al-Sartawi, 2024). The predominance of mid-career workers with higher education increased response credibility due to experiences, and the broadly distributed department ensured that various perspectives could be represented. But the low percentage of registered female professional and certificated forensic practitioners implied the deficiencies in infrastructure might pose barrier to the full onboarding of forensic accounting in Bangladesh at present. These results were in line with previous research evidence that indicated a lack of forensic accounting knowledge and proficiency within the South Asian banking environment.

Awareness of Forensic Accounting

The findings of the study showed different level of perception and understanding of forensic accounting by the bankers in Bangladesh.

Table 2: Awareness of Forensic Accounting among Respondents

Variable	Category	Percentage (%)
General Awareness	Heard of forensic accounting practices	54
	Not heard / Limited awareness	46
Source of Knowledge	Professional training/workshop	24
	University/Academic studies	18
	Colleagues/Peers	20
	Media/Internet/Reports	38
Bank Training	Bank provides training/workshops	29
	No training/workshops provided	71
Scope Understanding	Correctly identified forensic accounting scope	28
	Limited or vague understanding	72
Departmental Awareness	Audit & Compliance	72
	Financial Risk Management	63
	Operations	39
	Finance & Others	32
Perceived Relevance	Highly relevant	61
	Moderately relevant	26
	Low relevance	13

Table 2 explains that, of all the respondents, 54% mentioned they had some knowledge about forensic accounting and 46% confessed they had no knowledge or only little understanding of forensic accounting.

By those who knew, only 28% were able to accurately describe it as being about investigative accounting and financial fraud detection or litigation support. This indicated that, despite being somewhat familiar with the term as such, most respondents had no technical understanding or practical conception of what it actually meant. Departmental differences were notable. Content Knowledge is strongest respondents from the audit and compliance (72%) and financial risk management functions (63%), who both have direct responsibilities for financial fraud monitoring and regulatory compliance, expressed the highest awareness. In contrast, there was much lower awareness among operations staff (39%) and finance or support service staff (32%), this suggests that knowledge of forensic accounting is housed in financial risk specializing units. Respondents with professional certifications (CA, ACCA or CMA) are also found to have serious awareness as compared to those who only have graduation and post-graduation qualifications revealing the impact of advanced training in forensic and investigative accounting. In response to a question about the importance attached to forensic accounting, 61% indicated it was "highly relevant" for banking sector, 26% reported it as "moderately relevant," and only 13% rated it as of "low relevance". This indicated a positive attitude overall, even from the non-technical candidates. Nevertheless, the interviewees mentioned that forensic accounting still did not prevail in their entities and the awareness-raising only took the form of a couple of training sessions and regulatory requirements for financial fraud risk or anti-money laundering. It emerged that the level of knowledge of forensic accounting within the Bangladesh Banking sector was moderate and there is significant scope for improvement. The focus of awareness inside audit and compliance departments clearly demonstrated the silos in knowledge regarding forensic accounting that prevents it from being spread among other banking units. This compares with international research (Parvin *et al.,* 2023) which suggests that although forensic accounting is becoming recognized in developing economies, it continues to be the preserve of specialized professionals rather than being embedded throughout organizations.

In Bangladesh, the moderate level of awareness is due to lack of organized training facilities, insufficient emphasis by the regulatory authorities and partial coverage of forensic accounting in educational curricular. However, the generally positive perception of its importance reveals that bankers appreciate its value for improving risk management. Increasing awareness through focused education, workshops, and guidelines may thus be key to the uptake rate.

Application of Forensic Accounting in Banking Services

The results of the survey showed that the use of forensic accounting in Bangladeshi banks was at a level similar to incremental development, with relatively little institutionalization throughout the banking industry.

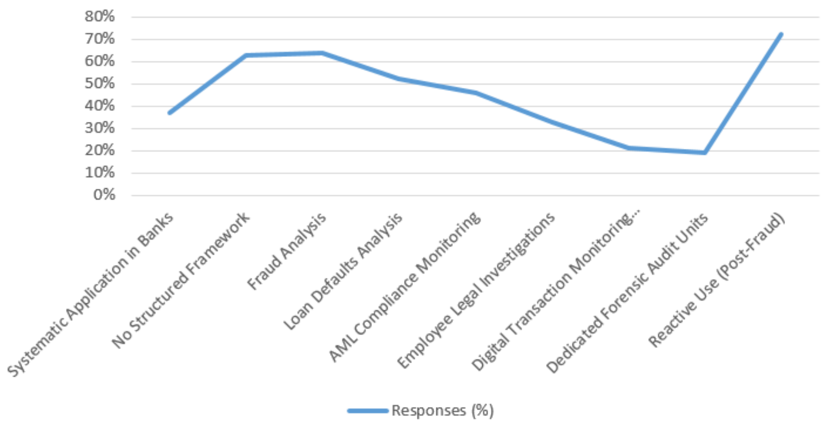

Figure 1: Application of Forensic Accounting in Banking Services

Figure 1 showed that, only 37% (140 respondents) reported that banks had applied forensic accounting in systematic areas, where as 63% said that their institutions had no structured framework of forensic accounting. Where it is used, even use is often found to be ad hoc and restricted to particular suspected fraud cases rather than part of the overall risk management process. Common areas where forensic accounting was used were fraud analysis (64%), loan defaults analysis (52%), AML compliance monitoring (46%) and employee legal investigations (33%). Its use in the area of digital transaction monitoring and detection of cybercrime was comparatively lower (21%), however, the era has seen an exponential increase in digital banking and mobile financial service users in Bangladesh. This change was a consequence of the failure of forensic methods to adapt to new technological challenges. Employees out of the audit compliance sections and were more likely to say they worked in fraud detection or AML compliance applications, and operations finance employees said that they had little exposure to forensic accounting skills within their normal work (Odeyemi *et al.,* 2024). The poll also graphed sizeable discrepancies in resources being put to use. Respondents' banks have a forensic audit unit only 19% of respondents said their banks had a specific forensic audit or investigation team; the remainder outsourced this function to internal auditors or used external consultants. Furthermore, 72% also stated that forensic accounting is used reactively, whereas only after a fraud has already occurred rather than as a proactive measure such as continuous monitoring and prevention. This ad hoc response had the effect of undermining the potential for forensic accounting in managing systemic risks and enhancing fraud resilience. The findings revealed that forensic accounting was a fragmented phenomenon in Bangladeshi banking practices and its use was far below the level at which it was to be accorded due importance. The extent to which forensic accounting was employed purely for fraud investigations and AML compliance demonstrated that banks were viewing the practice in limited, rather than integrated its capabilities into risk management. This discovery is in line with the results of studies conducted in other developing economies like Nigeria, and Kenya where forensic accounting was noted to be largely reactive due to lack of resources (Alabi *et al.,* 2022).

Financial Risk Management Practices

Results of the survey indicated that risk management in Bangladeshi banks was considerably diverse with regard to breadth, sophistication, and efficiency.

Figure 2: Financial Risk Management Practices in Banking Sector

The Figure 2 represents that, of 372 respondents, 59% declared that their banks adopted a strategy for financial risk management with the existence of policies relating to credit risk, market-risk, operational-risk and fraud risk, however they were written down; while the other 41% opined that such an approach was in formal or it was more on adhoc basis. This indicated that although there was widespread understanding among banks regarding the importance of financial risk management, the operationalization of robust systems varied between institutions. Credit risk management was the one area of banking practice most consistently addressed; 71% reported that their banks had credit appraisal and monitoring mechanisms for non-performing loans, and internal audit. Operational risk including internal process controls, IT systems and employee accountability was the concern of 62% of those polled. But the use of risk management targeted at fraud and cybercrime detection, as well as money laundering, was comparatively low. While less than a majority (38%) reported their banks made any use of forensic accounting methods or digital tracking screening tools in its operational risk controls. Respondents also noted differences in effectiveness levels for financial risk management between departments (Kaur & Mukherjee, 2023). It was a job that The backstage whoosh of the crowd, all sex and drugs and hip-hop, panicked Chris to tears at times, though the only ones that knew just how scared he was were those working alongside him. Audit-and-compliance departments tended to have the most oversight on risk policies to apply them, followed by operations TSU ranks units and finance/support ranks units which predominately had general procedural controls with limited capabilities or functionality. Fewer focus on risk management training and awareness: while 33% of respondents said that there was regular staff training attuned to fraud risk, cyber-threats and compliance steps were in place. This constitute a lack of being prepared in that particular human resource, which we believed indicated a major limitation of translating risk policies into operational, daily risk prevention. In terms of monitoring and reporting, 54% reported that their banks had well-defined risk incident-reporting systems in a place but the rest (46%) said the readiness for such incidents was neither uniform nor timely. Moreover, risk assessment tools and automatic monitoring systems were used by 29% of the sample only, which means that most banks primarily applied manual or traditional audit techniques but not data-supported or forensic ones. The results suggest that financial risk management system of Bangladeshi banks is somewhat emerged where emphasis on old-aged credit and operational risks are pre-dominant however less attention has been paid towards cyber, fraud and compliance risk. The partial incorporation of forensic accounting in risk frame-works is attributed to a deficiency in specialist skilled resources and inadequate regulatory pressure. This is supported by the prior undertakings in the region (Siddique, 2024) where it was highlighted that risk management has been acknowledged conceptually, there are gaps in its practice especially when we consider nascent domains such as fraud detection and digital security.

Effectiveness of Forensic Accounting

The survey outcomes indicated that Bangladeshi banks generally believed forensic accounting is effective but more potential utility was yet to be realized.

Table 3: Effectiveness of Forensic Accounting

Area of Effectiveness	Positive Impact (%)
Fraud Detection & Prevention	68%
Exposing Hidden Frauds, Misappropriation & Loan Irregularities	72%
AML & KYC Compliance	61%
Corporate Governance	57%
Digital Transaction Monitoring	39%
Operational Risk Management	42%

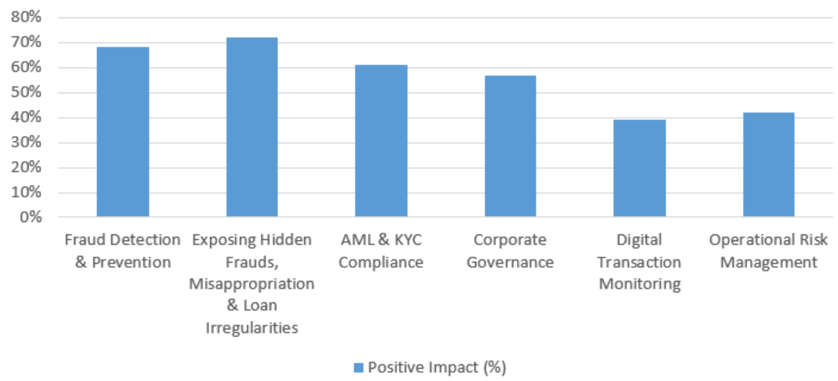

Figure 3: Effectiveness of Forensic Accounting in Banking Services

The Table 3 and Figure 3 illustrate that, from a total of 372 participants, 68% responded positively to the level of enhancement that forensic accounting had brought to fraud detection and prevention in the banking industry, leaving 32%, who indicated some doubt or disagreed because it was hardly applied and known. This means that, although forensic accounting was seen as useful in principle, it did not necessarily effectively contribute to the monitoring of all institutions. The most significant area where forensic accounting played a role in organizations as noted by 72 percent of the respondents, was through exposing hidden frauds, misappropriation of funds and irregularities in loan disbursement. On meeting anti-money laundering (AML) or know your customer (KYC) requirements, 61% said forensic accounting helped with better vigil and lower risk of crime. Likewise, 57% thought forensic accounting helped reinforce general corporate governance by acting as a check on employees and management. However, the impact of forensic accounting was not as apparent in the other aspects. Just 39% of respondents believe that forensic accountancy had been successfully embedded in digital transaction monitoring despite the increase in cyber fraud across mobile and online banking. Forty-two per cent also claimed that forensic accountancy had contributed to managing operational risks, while 58% argued traditional audit approaches continued to reign in terms of delivering operational risk management (Gudimetla *et al.,* 2024). Furthermore, the absence of dedicated forensic accounting arrangements and high dependence on external consultants constrained the effectiveness. Participants stressed that forensic accounting reactively (i.e., after the fact) implemented to investigate incidents of fraud is not as effective in reducing fraudulent gains as a preventive method. The results exposes that forensic accounting is considered as a best alternative to detect fraud, monitor compliance and improve governance in the Banking Sector of Bangladesh (Hossen *et al.,* 2025). Its potency in revealing sophisticated fraud patterns and improving regulatory compliance is consistent with the international relationship (forensic accounting as a formidable battering ram of financial entities was well established. But the partial incorporation in digital risk management and operational controls suggests that its effectiveness has not been maximized, as yet, in Bangladesh.

Challenges and Recommendations

The results of the survey revealed several obstacles to adoption and effectiveness of forensic accounting in Bangladeshi banks.

Figure 4 shows that, of 372 responses, 74% believed the biggest obstacle was the absence of forensic accountants who were properly trained in banks. The vast majority of banks used standard auditors or forensic services

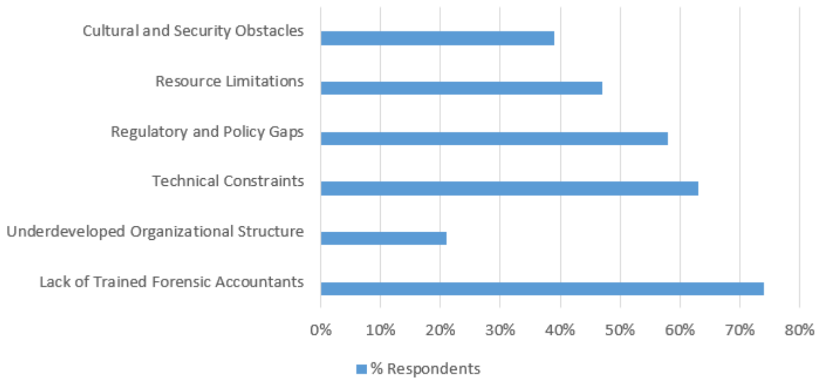

Figure 4: Challenges and Recommendations of Adopting Forensic Accounting

from third-party providers, resulting in dependence and lack of internal capabilities. A similar problem was the under development of forensic accounting within organization structures; only 21 per cent of respondents claimed to have dedicated forensic accounting resource with still many confirming that forensics work should always be case-based. Technical constraints proved to be another major obstacle we encountered. Approximately 63% of the participating banks stated that they did not have sophisticated digital forensic instruments or data analysis tools to monitor the huge transaction volumes and discover any anomaly in real time. This disparity was exacerbated in a context where mobile and online banking were taking off at a fast pace in Bangladesh. That's not just in terms of researching and developing cleaner energy options—58% also recognized a lack of regulation or policy as an obstacle. Although adherence to these guidelines was obligatory, there is no requirement to institutionalize forensic accounting procedures thereby leaving banks with the discretion if and how they want its application. Resources were also perceived as an issue by 47 percent of respondents who said that banks did not want to budget for forensic units or training programs, viewing them as cost centers and short-term expenses. Cultural and security obstacles were also raised, with 39 per cent citing a fear of managing not to embrace forensic accounting for concern it could expose waste or malpractice among colleagues. The results suggest that while the lack of sufficient human resource, shortcomings in technology, inadequacies in regulations and complacency within organizations are perceived to be the main issues against the adoption of NAFA in Bangladeshi banks. These constraints are in line with developing countries experiences, where forensic accounting is new and challenges are faced including cost sensitivity and lack of skills (Halimuzzaman *et al.,* 2024). The last, but less so to no recommendation is that forensic accounting appears to be more reactive than proactive; the application would Increase more benefits with preventive rather than corrective measure.

Findings

- Knowledge of forensic account within the banking employee was moderate without adequate training and practical exposure.
- Forensic accounting has been largely used reactively for fraud investigation and AML compliance with little forward thinking in RM.
- Forensic accounting works in terms of detection of fraud and governance but not able to used efficiently for digital financial risk management.
- Bank financial risk management frameworks were partially developed and old-style rather than forensic audit methods were still in general use.
- Barriers centered on a lack of knowledge, technology, regulation and resources, while facilitators focused on training, regulation, technology investment and transparency.

Recommendations

- Structured training programs and workshops must be organized by banks to increase employee awareness about forensic accountancy.
- It is suggested that forensic accounting should be included in an organization's overarching financial risk management processes, and not simply for the purpose of fraud detection.
- The need to invest in digital forensic tools and data analytics is required for vigilance and early detection on fraud in online banking, as well as mobile banking.
- In high financial risk areas of banking, Bangladesh Bank and other regulators should insist on the procedures being implemented across banks.
- Banks need to prepare resources and be willing to invest them in building forensic units that are resourced

properly, rather than seen as a cost.

- A tone of transparency and accountability should be cultivated within banks to subvert organizational resistance and to promote proactive application of forensic accounting.

CONCLUSION

This research investigated the use of forensic accounting as a strategic tool in managing financial risk by the banking industry in Bangladesh. Results indicated that most respondents had intermediate knowledge of forensic accounting, but its systematic use for financial supervision, fraud detection and compliance of regulations remained restricted to some large organizations. The empirical findings revealed evidence of significant positive association between the adoption of forensic accounting as a practice and improvement in financial control, fraud prevention, and regulatory compliance. The survey also highlights difficulties such as insufficient training, the lack of forensic tools and deficient integration between forensic units and audit services, which constrained its role in mitigating financial risks. Nevertheless, the study focused only on what bank employees' perceived from a quantitative standpoint and not that of customers, as well as whether any behavioral evidence might be found for enhancing financial integrity. Future studies need to replicate the present results using mixed method approaches as well as longitudinal data in larger samples. The study suggests that banking management in Bangladesh should focus on enhancing capacities through ongoing professional training (in forensic accounting), incorporating state-of-the-art digital forensic into risk-management mechanisms, and improving cross-departmental coordination among compliance, audit and IT departments within banks. In addition, incorporating forensic practices into leadership strategies may increase the degree of distinctive transparency for organizational integrity and decision making, to gradually improve customer trust and satisfaction among retail banking services. With the formalization of forensic accounting as a part and parcel for the financial governance, banks in Bangladesh can ensure not only prevention of financial crimes but also brace themselves to develop more resilient & trustworthy financial eco-system in line with global best practices.

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