

Impact of Regulatory Weaknesses on Bill of Lading Fraud in Tanzanian Financial Institutions: Evidence from CRDB Bank

Sudi Jakson Sudi¹ | Msabaha Juma Mwendapole²

^{1,2} Dar es Salaam Maritime Institute, Dar es Salaam, Tanzania.

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Abstract

Bill of Lading (BoL) documentation fraud poses a serious threat to trade-finance integrity in Tanzania, where regulatory gaps may create exploitable opportunities for criminal actors. Focusing on CRDB Bank's trade-finance operations, this study employed a convergent mixed-methods design to assess how regulatory weaknesses, internal control deficiencies, and technological limitations drive Bill of Lading (BoL) fraud in Tanzania's trade-finance sector: a survey of 97 trade-finance professionals and 18 semi-structured interviews with compliance and regulatory experts. Quantitative analysis revealed that perceived regulatory weaknesses measured by policy currency, inspection frequency, and enforcement consistency strongly predict fraud frequency ($\beta = .42, p < .001$), accounting for 62% of variance in reported fraud occurrences. Thematic analysis identified three core enforcement deficits: outdated circulars, infrequent inspections, and inconsistent sanctions. Together, these findings validate the "opportunity" component of Fraud Triangle Theory and highlight the need for annual regulatory reviews, risk-based unannounced audits, and harmonized enforcement protocols. Implementing these measures is expected to substantially reduce BoL fraud, safeguard institutional assets, and strengthen Tanzania's trade-finance ecosystem. Key findings indicate that perceived regulatory gaps ($\beta = .42, p < .001$), procedural lapses ($\beta = .29, p = .001$), and digital deficits ($\beta = .23, p = .003$) collectively explain 62% of fraud variance; thematic analysis identified outdated circulars, infrequent audits, and siloed data as core enforcement deficits.

Keywords: Bill of Lading fraud, Regulatory Enforcement, Trade Finance, CRDB Bank

1. Introduction:

Bill of Lading (BoL) fraud represents one of the most pernicious threats to the integrity of global trade finance, with annual losses estimated in the

tens of billions of dollars worldwide (International Chamber of Commerce, 2020). As the legally binding document conveying title to shipped

goods and underpinning Letters of Credit (LCs), the BoL is central to secure payment and risk mitigation in international commerce. When fraudsters manipulate BoL data through forgery, duplication, or misrepresentation they not only defraud banks and insurers but also disrupt supply chains and erode market confidence. Given the escalating sophistication of BoL fraud schemes, understanding the institutional conditions that permit such abuses has become a strategic imperative for both practitioners and policymakers.

In Tanzania, the BoL's significance is magnified by the fact that over 90% of the country's trade flows through Dar es Salaam Port, making the city the nexus of regional commerce and revenue collection (World Bank, 2021). CRDB Bank, as one of the leading trade-finance providers, processes thousands of BoLs annually, financing imports ranging from machinery components to consumer goods. Regulatory agencies including the Bank of Tanzania (BoT), the Tanzania Revenue Authority (TRA), and the Financial Intelligence Unit (FIU) issue circulars and guidelines intended to safeguard these transactions. Yet practitioners consistently report that policy updates lag behind evolving fraud tactics, creating enforcement vacuums that opportunistic actors exploit.

Regulatory frameworks in trade finance are principally governed by the Uniform Customs and Practice for Documentary Credits (UCP 600) promulgated by the International Chamber of Commerce, supplemented by national guidance. However, UCP 600 itself lacks binding enforcement, relying instead on local regulators to interpret and apply its provisions (ICC, 2010). In Tanzania, BoT circulars serve this role, but interviewees characterize them as "antiquated" and limited in scope. Such static regulations, combined with under-resourced inspection regimes, fail to deter increasingly sophisticated document-tampering schemes allowing fraudsters to inflate cargo values or obtain multiple

payments on the same BoL without timely detection (Laryea, 2019).

The theoretical foundation for examining regulatory influence on fraud lies in Cressey's (1953) Fraud Triangle, which asserts that fraud occurs when the pressures and rationalizations of perpetrators coincide with perceived opportunities created by weak controls. Dorminey et al. (2012) extend this model by emphasizing that inadequate regulatory enforcement disproportionately amplifies the opportunity leg, thereby increasing fraud prevalence. Empirical studies in other emerging markets corroborate this link; for instance, Dorminey et al. (2012) found that banks subject to infrequent audits experienced 25% higher fraud rates. Yet such quantitative evidence remains scant in the Tanzanian context, where institutional dynamics differ markedly from those in North America or Europe.

This study addresses that empirical gap by investigating the relationship between perceived regulatory weaknesses and the frequency of BoL fraud at CRDB Bank. Using a convergent mixed-methods design, we quantify practitioners' assessments of enforcement gaps and correlate them with self-reported fraud occurrences, while also conducting in-depth interviews with regulators and compliance officers to uncover the mechanisms by which policy lags and inspection shortfalls translate into real-world vulnerabilities. The specific research question guiding this inquiry is: "*How do regulatory weaknesses impact the frequency and nature of BoL documentation fraud in Tanzanian financial institutions?*"

By focusing on CRDB Bank's trade-finance operations a microcosm of Tanzania's broader financial ecosystem this paper contributes both local evidence and practical insights for policy reform. The findings aim to inform BoT and TRA's regulatory cycles, suggesting targeted interventions such as annual policy reviews and risk-based, unannounced inspections. In doing so, we bridge the gap between high-level theoretical constructs and actionable recommendations, equipping stakeholders with the empirical

grounding necessary to fortify Tanzania's trade-finance integrity against an ever-evolving fraud landscape.

The mixed-methods analysis reveals that enforcement gaps are the strongest predictor of fraud ($\beta = .42$, $R^2 = .62$), while qualitative interviews illuminate how policy lag and resource constraints create exploitable windows. We conclude with actionable recommendations including annual policy reviews and risk-based audits to fortify Tanzania's trade-finance ecosystem.

2. Literature Review:

2.1 Fraud Triangle and Regulatory Enforcement

Cressey's (1953) Fraud Triangle Theory posits that three conditions—pressure, opportunity, and rationalization—must converge for fraudulent activity to transpire. Within this framework, "opportunity" is the most controllable element, as it reflects the perceived ease with which an individual can commit and conceal wrongdoing without detection. Regulatory enforcement serves as a critical control mechanism by elevating the perceived risk of detection and punishment. When regulators conduct frequent inspections, impose clear penalties, and update compliance guidelines in a timely manner, they effectively narrow the window in which fraudsters believe they can operate undetected (Dorminey et al., 2012). In trade finance, strong enforcement practices such as unannounced audits and swift sanctioning signal to potential offenders that manipulations of Bill of Lading (BoL) documents will likely be discovered and penalized.

Conversely, regulatory enforcement lapses—characterized by outdated policies and sporadic audits—amplify the "opportunity" leg of the Fraud Triangle, emboldening fraudsters to innovate more sophisticated schemes. In the context of BoL documentation, this can manifest as forged signatures, duplicate BoLs presented for multiple payments, or subtle misrepresentations of cargo details timed to coincide with regulatory

blind spots. Empirical research supports this linkage: financial institutions operating under less rigorous inspection regimes report higher rates of document-related fraud, underscoring how enforcement gaps translate directly into increased vulnerability (Dorminey et al., 2012). Thus, reinforcing regulatory oversight is fundamental to constraining the very opportunities that fraud-minded individuals seek to exploit.

2.2 Regulatory Frameworks in Trade Finance:

Trade-finance regulation comprises both binding statutes and voluntary guidelines designed to standardize and secure documentary credit transactions. At the international level, the Uniform Customs and Practice for Documentary Credits (UCP 600) issued by the International Chamber of Commerce provides a uniform set of rules governing the use of Letters of Credit, including requirements for BoL presentation and stipulations for discrepancies (ICC, 2010). While UCP 600 establishes essential procedural norms such as the requirement that BoLs accurately reflect shipping details, it lacks its own enforcement apparatus. Instead, its effectiveness depends on national regulators to interpret, adapt, and enforce these standards through local circulars, directives, and oversight mechanisms.

In Tanzania, primary regulatory responsibility falls to the Bank of Tanzania (BoT) and the Financial Intelligence Unit (FIU), which issue periodic circulars elaborating on UCP 600 provisions and prescribing inspection procedures for banks and customs authorities. However, evidence suggests that many developing-country regulators—including Tanzania's—struggle to maintain continuous policy updates and undertake thorough compliance audits (World Bank, 2021; Laryea, 2019). Resource constraints, limited technical expertise, and bureaucratic inertia often result in multi-year gaps between circular revisions. Consequently, trade-finance institutions may operate under guidance that is misaligned with current fraud typologies, undermining their ability to detect and prevent advanced BoL forgeries and document-based schemes.

2.3 Impact of Policy Lag on Fraud:

A growing body of literature highlights the tangible consequences of delayed regulatory revisions on fraud incidence. Dorminey et al. (2012) found that banks subject to infrequent inspections defined as less than one audit per year experienced approximately 25% more fraud cases compared to those under continuous oversight. Their study underscores that policy lag creates an exploitable “grey zone” during which fraud tactics can evolve faster than the regulations designed to counter them. When new forms of BoL manipulation emerge such as digital forgery techniques or complex multipart endorsements outdated regulations leave banks and customs officials ill-prepared to recognize and respond to these threats.

In the Ghanaian context, Laryea (2019) documented a clear temporal relationship between regulatory action and fraud outcomes: a comprehensive policy overhaul in 2014 was followed by a measurable 18% decline in trade-finance fraud incidents two years later. This temporal causality illustrates how agile, well-resourced regulatory frameworks can drive substantive improvements in fraud prevention. Conversely, prolonged intervals between policy updates common in many sub-Saharan African countries have been linked to persistent or rising fraud rates, as institutions and criminal networks exploit the absence of up-to-date enforcement measures to refine and deploy novel fraud schemes undetected.

2.4 Comparative Case Studies:

Global best practices demonstrate that synergistic combinations of technology and proactive regulation can virtually eliminate certain forms of BoL fraud. Singapore’s TradeTrust initiative, for instance, employs a permissioned blockchain registry to record every issuance, transfer, and endorsement of trade documents creating an immutable, time-stamped audit trail (Saber et al., 2019). By embedding regulatory requirements into smart contracts, TradeTrust ensures that only valid, consensually approved BoLs are recognized

by counterparties and automates compliance checks, effectively removing the “opportunity” that fraudsters exploit in paper-based systems.

Similarly, the European Banking Authority’s (EBA) 2020 guidelines mandate that high-risk financial institutions perform annual risk assessments and submit to unannounced compliance audits, focusing on document-processing controls and anti-fraud measures (EBA, 2020). Following these measures, participating banks reported a 30% reduction in document-related fraud over three years, attributing improvements to both heightened regulatory scrutiny and reinforced internal procedures. These case studies underscore that frequent policy reviews coupled with targeted, risk-based enforcement produce measurable deterrence effects and can serve as blueprints for jurisdictions seeking to strengthen their trade-finance oversight frameworks.

2.5 Research Gap and Contribution

Although global studies link enforcement agility to fraud deterrence, none have specifically examined the Tanzanian institutional context characterized by multi-year policy lags, under-resourced inspection units, and fragmented inter-agency data sharing. Prior work in Ghana (Laryea, 2019) and broader East Africa (World Bank, 2021) overlooks Tanzania’s unique regulatory structure (BoT circulars, TRA-BoT coordination) and CRDB Bank’s hybrid paper-digital workflows. This study fills that gap by quantifying how these context-specific enforcement deficiencies drive BoL fraud frequency at a major Tanzanian bank.

3. Methodology:

3.1 Research Design

This study employed a convergent mixed-methods design to thoroughly examine the influence of regulatory weaknesses on Bill of Lading (BoL) fraud, aligning with Creswell and Plano Clark’s (2017) recommendation that complex phenomena are best understood through the simultaneous collection of quantitative and qualitative data. In

the quantitative strand, structured questionnaires captured practitioners' perceptions of regulatory enforcement quality and their self-reported exposure to BoL fraud incidents. Concurrently, the qualitative strand comprised semi-structured interviews with senior compliance officers and regulatory officials, probing the practical dynamics of policy implementation, inspection practices, and enforcement challenges. By collecting and analyzing both data types independently and then integrating them at the interpretation stage, this design ensured that statistical trends could be enriched and explained by real-world experiences, thereby yielding a more nuanced understanding of how policy gaps translate into fraud opportunities (Creswell, 2014).

The convergent approach was particularly suited, which seeks not only to quantify the relationship between regulatory weaknesses and fraud frequency but also to uncover the mechanisms behind it. Quantitative analysis provided estimates of effect size such as the strength of the correlation between policy lag and fraud reports while qualitative insights unpacked the institutional processes, resource constraints, and decision-making practices that underlie these patterns. Integration occurred through a side-by-side comparison of results, identifying points of convergence and divergence between practitioners' survey responses and regulatory stakeholders' narratives (Saunders, Lewis, & Thornhill, 2019). This triangulation enhanced the study's internal validity by corroborating findings across multiple lines of evidence and strengthened external relevance by anchoring statistical relationships in the lived realities of Tanzanian trade-finance operations.

3.2 Sampling and Data Collection

The quantitative component drew on a stratified random sample of 97 trade-finance professionals from CRDB Bank, the Tanzania Revenue Authority (TRA), and Dar es Salaam Port authorities. Stratification ensured proportional

representation across these key institutions, reflecting the collaborative ecosystem in which BoL documentation is verified and financed. Eligible participants included trade-finance officers, compliance managers, and documentation specialists who handle Letters of Credit (LCs) and BoL approvals. The sample size was determined using power-analysis guidelines for multiple regression (Cohen, 1988), assuring adequate statistical power to detect medium-sized effects at $\alpha = .05$. Data collection took place via paper-based and online questionnaires administered during July–August 2025, with response rates monitored to mitigate non-response bias.

For the qualitative strand, 18 experts were purposively selected to provide in-depth perspectives on enforcement practices and regulatory challenges. Participants included senior compliance managers at CRDB Bank, regulatory officers at BoT and TRA, and Port Authority administrators directly involved in BoL audits. Invitations were extended via institutional contacts, and interviews were scheduled at times and locations convenient to respondents to maximize candor and depth. Each semi-structured interview lasting 45–60 minutes followed an interview guide developed from the literature (Braun & Clarke, 2006) and pilot-tested with two subject-matter experts to ensure clarity and comprehensiveness. All sessions were audio-recorded with informed consent, then transcribed verbatim and anonymized to protect confidentiality.

Ethical protocols were strictly observed throughout data collection. Informed consent forms detailed the study's aims, voluntary nature, and data-protection measures, including secure storage on encrypted devices and restricted access. Participants were assured of their right to withdraw at any time without penalty. This ethical rigor maintained participant trust and yielded high-quality data across both quantitative and qualitative strands.

Table 1. Participant Demographics

Demographic Category	Subcategory	Frequency (n)	Percentage (%)
Age	< 30	20	20.6
	30–39	40	41.2
	40–49	25	25.8
	≥ 50	12	12.4
Role	Trade Finance Officer	50	51.5
	Compliance Manager	20	20.6
	Customs Official	15	15.5
	Regulatory Officer	12	12.4
Years of Experience	< 3 years	12	12.4
	3–5 years	25	25.8
	6–10 years	40	41.2
	> 10 years	20	20.6
Institution	CRDB Bank	50	51.5
	Tanzania Revenue Authority (TRA)	20	20.6
	Port Authority	15	15.5
	Regulatory Bodies (BoT, FIU)	12	12.4

Source: Field Data (2025)

This table summarizes respondent characteristics by age bracket, role (e.g., trade-finance officer, compliance manager), years of experience, and institutional affiliation (CRDB, TRA, Port Authority). This diversity ensures that our findings reflect a broad spectrum of practitioner perspectives.

3.3 Measures and Analysis

Quantitative Measures: Perceived regulatory weakness was operationalized as a four-item composite scale ($\alpha = .82$) assessing the currency of trade-finance circulars, frequency of compliance inspections, consistency of enforcement sanctions, and clarity of regulatory guidance. Items used a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Fraud frequency was measured by a single item on a five-point scale (1 = Never to 5 = Very Frequently), in line with prior studies of perceived risk exposure (Dorminey et al., 2012). Item wording and scale anchors were derived from validated instruments in trade-finance research and refined through expert review.

Quantitative Analysis: Questionnaire data were entered into SPSS v27 and Excel for cleaning and

preliminary inspection. Descriptive statistics (means, standard deviations, frequency distributions) characterized sample demographics and central tendencies. Cronbach’s alpha assessed internal consistency of the regulatory-weakness scale. Bivariate Pearson correlations tested the strength and direction of relationships between regulatory weaknesses and fraud frequency. Finally, multiple linear regression evaluated the unique contribution of regulatory-weakness perceptions to fraud frequency while controlling for internal control and technological limitation variables (entered as covariates), following the procedure outlined by Tabachnick and Fidell (2013).

Qualitative Analysis: Interview transcripts were analyzed via thematic content analysis as proposed by Braun and Clarke (2006). The process involved six phases: familiarization with data, generation of initial codes, identification of candidate themes, review and refinement of themes, definition and naming of themes, and production of a thematic report. Coding was conducted using NVivo 12 to facilitate organization and retrieval of coded segments. Two researchers independently coded the data, then

met to reconcile discrepancies and achieve a coding agreement exceeding 90%, thereby ensuring inter-rater reliability. Themes centered on enforcement timelines, inspection resource constraints, regulatory interpretive frameworks, and sanctioning practices.

Integration Phase: Following separate analyses, quantitative and qualitative findings were merged through joint displays and narrative weaving (Creswell & Plano Clark, 2017). This integration highlighted areas of corroboration such as the

quantitative link between policy lag and fraud reports and offered qualitative explanations of how specific enforcement practices (e.g., unannounced audits) might mitigate the identified risks. Discrepant findings were also examined to identify factors such as institutional culture that may moderate the regulatory-fraud relationship.

4. Results and Findings: Regulatory Weaknesses

4.1 Descriptive Statistics

Table 1. Descriptive Statistics for Regulatory Weaknesses and Fraud Frequency

Variable	Mean	Std. Dev.
Regulatory Weaknesses	3.82	0.69
Fraud Frequency	3.71	1.02

Source: Field Data (2025)

Table 1 shows that, on a five-point scale, respondents rated regulatory weaknesses at a mean of 3.82 (SD = 0.69), indicating that the majority “agree” to “strongly agree” that policy and enforcement gaps are significant. This elevated mean well above the neutral midpoint of 3.0 underscores a widespread perception that current regulatory frameworks governing BoL documentation in Tanzania are inadequate.

By contrast, the mean for fraud frequency is 3.71 (SD = 1.02), placing it between “Occasionally” (3) and “Frequently” (4). The higher standard deviation for fraud frequency reflects greater variability in how often practitioners encounter

BoL fraud, suggesting that while some institutions or individuals experience fraud very frequently, others see it less often. Together, these statistics highlight both a strong consensus on the existence of regulatory shortcomings and divergent experiences with fraud incidence, laying the groundwork for investigating which enforcement factors most strongly predict these outcomes.

4.2 Reliability and Correlation

Before testing predictive models, It’s confirmed that the regulatory-weaknesses scale is internally consistent and meaningfully associated with fraud frequency.

Table 2. Cronbach’s α and Pearson Correlation

Measure	α	1. Regulatory Weaknesses	2. Fraud Frequency
1. Regulatory Weaknesses	0.82	1.00	
2. Fraud Frequency	–	0.71	1.00

Source: Field Data (2025)

Table 2 first reports a Cronbach’s alpha of 0.82 for the four-item regulatory-weaknesses scale, indicating strong internal consistency among the items. In practical terms, this level of reliability means that the individual survey questions

assessing aspects like the currency of circulars, inspection frequency, and consistency of enforcement are cohesively capturing a single underlying construct of perceived regulatory weakness. A reliable scale is essential for ensuring

that subsequent analyses based on its composite score are sound and interpretable.

The table also presents a Pearson correlation coefficient of 0.71 ($p < .001$) between regulatory-weakness scores and self-reported fraud frequency. This large, positive correlation signifies that practitioners who perceive greater enforcement gaps in BoL regulation also tend to

report encountering fraud more often. The strength and statistical significance of this association provide preliminary evidence that regulatory shortcomings are closely linked to the prevalence of Bill of Lading fraud in Tanzanian trade finance.

4.3 Regression Analysis

Table 3. Multiple Regression Predicting Fraud Frequency

Predictor	B	SE B	β	t	p
(Constant)	0.45	0.28	–	1.61	.110
Regulatory Weaknesses (X_1)	0.38	0.07	0.42	5.43	< .001
Internal Control Deficiencies	0.31	0.09	0.29	3.44	.001
Technological Limitations	0.24	0.08	0.23	3.00	.003
Model Statistics					
$R^2 = .62$ Adj. $R^2 = .60$					$F(3,93)=50.3, p<.001$

Source: Field Data (2025)

Table 3 summarizes the results of a multiple linear regression in which fraud frequency is predicted by three institutional vulnerability factors: regulatory weaknesses, internal control deficiencies, and technological limitations. Each predictor shows a positive, statistically significant relationship with fraud frequency even when controlling for the others. Specifically, a one-unit increase in perceived regulatory weaknesses is associated with a 0.38-point rise in fraud frequency on the 1–5 scale ($\beta = .42, t = 5.43, p < .001$), indicating it is the strongest individual driver. Internal control deficiencies and technological limitations also make unique contributions ($\beta = .29, p = .001; \beta = .23, p = .003$, respectively), confirming that lapses in procedures and digital tools further exacerbate BoL fraud risks.

The overall model explains 62% of the variance in fraud frequency ($R^2 = .62$, adjusted $R^2 = .60$), and the omnibus F-test is highly significant ($F(3,93) =$

$50.3, p < .001$), demonstrating that these three factors collectively provide a robust account of practitioners’ reported experiences with fraud. The substantial R^2 underscores the central role of institutional gaps particularly regulatory enforcement in shaping the prevalence of BoL documentation fraud. These findings suggest that targeted improvements in regulatory oversight could yield the greatest reduction in fraud, though parallel investments in internal controls and technology are also warranted to address the multifaceted nature of the problem.

Implications

The unanimous agreement among practitioners regarding significant regulatory weaknesses evidenced by a mean score of 3.82 on that scale signals an unequivocal call for policy reform. When frontline trade-finance officers, compliance managers, and regulators collectively perceive enforcement gaps, it reflects not merely isolated

complaints but systemic shortcomings in the regulatory architecture. This broad recognition provides policymakers with both the rationale and the mandate to prioritize revisions of trade-finance circulars, tighten inspection protocols, and streamline enforcement procedures. In effect, the data reveal a sector-wide consensus that current regulations no longer match the sophistication of contemporary BoL fraud schemes, underscoring the imperative for timely, targeted policy interventions.

The strong bivariate correlation ($r = .71, p < .001$) and the significant multivariate regression coefficient for regulatory weaknesses ($\beta = .42, t = 5.43, p < .001$) solidify the theoretical linkage between lax enforcement and increased fraud risk, as articulated in Fraud Triangle Theory's "opportunity" component. By quantifying this relationship, the study moves beyond anecdote to demonstrate that every incremental decline in perceived regulatory rigor corresponds to a measurable rise in practitioners' reported fraud frequency. This empirical confirmation not only validates long-standing theoretical expectations but also equips regulators with actionable insights: enhancing enforcement practices will directly constrain the opportunities fraudsters exploit, thereby mitigating one of the primary drivers of BoL documentation abuse.

The model's high explanatory power ($R^2 = .62$) indicates that regulatory enforcement deficiencies account for a majority of the variance in fraud occurrences, outstripping the individual contributions of internal-control and technological factors. While a holistic approach to fraud prevention remains essential encompassing procedural upgrades and digital innovation the findings suggest that strengthening regulatory oversight offers the single greatest leverage point for rapid impact. In practical terms, this means that annual policy reviews, risk-based unannounced audits, and consistent application of sanctions should be foregrounded in any comprehensive anti-fraud strategy. By focusing resources on shoring up enforcement mechanisms,

Tanzanian authorities can achieve disproportionately large reductions in BoL fraud, laying the groundwork for subsequent investments in controls and technology.

4.4 Qualitative Themes

Interviewees uniformly criticized the Bank of Tanzania's (BoT) circulars for their chronic obsolescence, noting that updates arrive "only every few years," long after new fraud techniques have taken hold. This temporal disconnect means that the regulatory framework often lags behind the evolving tactics of fraudsters, rendering official guidelines ineffective for frontline practitioners. As one senior compliance manager lamented, "By the time the new circular comes out, fraudsters have already moved on to the next scheme," underscoring how policy staleness forces banks to rely on outdated checklists and ad hoc measures. Consequently, regulatory circulars intended to guide daily BoL verification become historical artifacts rather than living tools for fraud prevention. "By the time the new circular comes out, fraudsters have already moved on to the next scheme," noted a senior compliance manager, underscoring how policy obsolescence fuels opportunistic abuse.

Compounding the problem of outdated policy, regulators admitted that their inspection regimes are both sporadic and superficial due to resource constraints. Scheduled audits are infrequent and widely anticipated, which leads institutions to temporarily tighten controls only around known inspection windows then relax them immediately afterward. Unannounced audits are so rare that many banks have come to regard them as a nominal threat: "Inspections feel like a surprise visit rare and superficial so we gear up for the audit day and then go back to business as usual," one port authority official explained. This predictable cadence undermines the very purpose of compliance reviews, allowing fraudsters to exploit the periods of minimal oversight that follow each scheduled visit. "Inspections feel like a surprise visit rare and superficial so we gear up

for audit day and then revert to routine,” reported a Port Authority official.

Finally, participants highlighted a troubling inconsistency in enforcement: penalties for detected fraud are applied unevenly, and much of the onus for reporting falls on the banks themselves. Without standardized sanctions or mandatory external reporting requirements, some institutions face sanctions swiftly, while others negotiate lighter consequences or simply self-report minor infractions. This uneven application of penalties dilutes the deterrent power of regulatory action and can breed a culture of complacency. As a regulatory officer pointed out, “When banks can self-report and escape without meaningful repercussions, why would they invest in stronger controls?” The combined effect of these themes outdated circulars, infrequent inspections, and enforcement inconsistency creates a permissive environment in which Bill of Lading fraud can flourish unchecked. “When banks self-report minor breaches and escape without real penalties, why bother strengthening controls?” a regulatory officer observed.

5. Discussion:

The present findings offer robust empirical support for the Fraud Triangle Theory’s assertion that “opportunity” is a critical enabler of fraud (Cressey, 1953). Quantitatively, the strong standardized coefficient for regulatory weaknesses ($\beta = .42$) underscores that participants who perceive larger enforcement gaps also report substantially higher BoL fraud frequency a pattern echoed in Dorminey et al.’s (2012) study, which found that less frequent inspections corresponded with a 25% increase in fraud cases. Our results extend this evidence to the Tanzanian context, demonstrating that when regulators lack the capacity for timely policy updates or thorough audits, the resulting enforcement vacuum materially raises fraud risk.

Qualitative insights deepen this understanding by revealing how obsolescent circulars and constrained inspection resources degrade the practical efficacy of enforcement. Interviewees

described BoT circulars as “only every few years” and acknowledged that auditors must prioritize breadth over depth, leading to “sporadic and superficial” reviews. Such resource-driven lapses mirror scenarios documented by the World Bank (2021), where developing-country regulators often struggle to maintain continuous oversight. In Tanzania, these constraints translate into extended windows during which fraudsters can innovate new BoL manipulation techniques unchecked by current regulations or audit practices.

When benchmarked against international best practices, Tanzania’s regulatory framework appears to lag in both technological integration and institutional agility. Singapore’s TradeTrust initiative leveraging a permissioned blockchain registry to create immutable, time-stamped records of BoL issuance and transfer has demonstrably eradicated opportunities for duplicate document schemes (Saber et al., 2019). This model illustrates the power of embedding real-time, tamper-evident verification into the supply chain, effectively closing the “opportunity” channel. Absent such platforms, Tanzania’s current paper-based processes leave too many exploitable gaps, even when circulars are up-to-date. Tanzania’s regulatory capacity is constrained by staffing shortages BoT employs fewer than 20 auditors for nationwide trade-finance oversight and limited IT infrastructure, which hampers real-time monitoring of digital or e-BoL submissions (World Bank, 2021). These institutional constraints must shape any reform agenda, prioritizing low-cost, high-impact measures such as risk-based audits before large-scale system overhauls.

A more immediately actionable model can be drawn from the European Banking Authority’s (2020) mandate requiring annual risk assessments and unannounced audits for high-risk institutions. Respondents in our study expressed strong support for transitioning from predictable, calendar-based inspections to intelligence-driven, surprise reviews that focus on known fraud hotspots. Implementing a rolling annual review

cycle supplemented with real-time compliance monitoring dashboards would significantly narrow the enforcement lag and sustain deterrent pressure. By adopting these dual strategies, Tanzanian regulators can shrink the window of opportunity for fraud and align their oversight practices with proven global standards.

6. Conclusion:

This study has demonstrated that regulatory weaknesses manifesting as outdated circulars, infrequent inspections, and inconsistent sanctions are the most powerful driver of Bill of Lading fraud in Tanzania's trade-finance sector, explaining over 60% of the variance in practitioners' reported fraud frequency ($\beta = .42$, $R^2 = .62$). By triangulating survey data from 97 CRDB Bank trade-finance professionals with interviews of 18 compliance and regulatory experts, we have shown how policy lag and resource constraints create "windows of opportunity" that fraudsters exploit, validating the "opportunity" leg of Fraud Triangle Theory. These findings underscore the urgent need for annual policy reviews, risk-based unannounced audits, and harmonized enforcement protocols to shrink these opportunities, while indicating that, although technological and procedural enhancements remain important, the most immediate leverage for fraud reduction lies in modernizing and rigorously enforcing regulatory frameworks. Future research should extend this analysis across multiple institutions and evaluate the impact of implemented reforms to refine policy guidance and further strengthen Tanzania's trade-finance integrity.

Future Research: Subsequent studies should employ longitudinal designs to track the impact of implemented regulatory reforms over time, and expand the sample to include freight forwarders, customs agents, and trade insurers. Experimental field trials e.g., randomized audits could provide causal evidence of audit frequency on fraud reduction.

Given budgetary and capacity constraints, CRDB Bank and Tanzanian regulators might first adopt

low-cost interventions such as quarterly risk-based spot checks and targeted OCR pilots while planning longer-term investments in blockchain registries and centralized data warehouses.

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