

A Survey of Literature on Suspicious Transaction Monitoring: Anti-Money Laundering Compliance and Financial Performance of Commercial Banks in South Sudan

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Abstract

This research delves into the nexus between anti-money laundering (AML) compliance and the financial performance of selected commercial banks in South Sudan, a country still on the FATF grey list despite substantial governmental investments in AML initiatives. Utilizing a cross-sectional and mixed-method design, the study specifically aimed to scrutinize the relationship between internal policies and the financial performance of commercial banks. Drawing from a sample of 105 participants across four banks, a comprehensive dataset comprising both quantitative and qualitative information was gathered. The findings underscore a noteworthy connection between internal policies and financial performance ($r = 0.436$, $p = 0.000$, $n = 86$), suggesting that improvements in internal policies may enhance financial outcomes. This study emphasizes the pivotal role of robust internal policies in fostering AML compliance and subsequently enhancing the financial well-being of commercial banks in South Sudan.

Keywords

Anti-Money Laundering, Compliance, Financial Performance, Suspicious Transaction Monitoring, South Sudan

1. Introduction

In the wake of globalization and increasing financial interconnectedness, the issue of money laundering has emerged as a pressing concern for governments,

regulatory bodies, and financial institutions worldwide (Benarroch & Biswas, 2022). Commercial banks, which are key stakeholders in the global financial arena, find themselves particularly vulnerable to the threats posed by money laundering activities (Chen et al., 2019). South Sudan, having emerged from a prolonged period of conflict and economic instability, is confronted with distinctive challenges in its efforts to combat money laundering, while also aiming to fortify a resilient and sustainable banking sector (Kegoro, 2019). Hence, grasping the relationship between anti-money laundering (AML) compliance and the financial performance within the realm of South Sudan's commercial banks is essential for fostering economic growth and safeguarding financial integrity.

This study is designed to delve into the complex relationship between AML compliance, with a specific emphasis on suspicious transaction reporting, and the financial performance of selected commercial banks in South Sudan. In doing so, it endeavors to shed light on the effectiveness of AML measures and their repercussions on the financial well-being and stability of banks operating within a challenging economic landscape (McCathy, 2020). This investigation is particularly pertinent, considering the augmented focus on AML compliance by regulatory authorities and international organizations, alongside South Sudan's endeavor to improve the governance and transparency of its financial sector (Naylor, 2019).

Adopting a mixed-method approach, this research integrates quantitative analysis with qualitative insights to thoroughly assess the dynamics of AML compliance and financial performance in South Sudan's commercial banking sector (Creswell & Creswell, 2017). By collecting and analyzing both numerical data and qualitative information from interviews and document reviews, the study aims to comprehensively understand the practices of AML compliance and its impact on financial outcomes (Miles et al., 2014). Through triangulation of data from various sources, it seeks to offer nuanced insights into the relationship between suspicious transaction reporting and financial performance, while providing practical recommendations for policymakers, regulators, and banking professionals (Creswell & Plano Clark, 2018).

To set the stage for the investigation, the study begins with an overview of the evolution of AML regulations and practices in South Sudan, documenting the historical progression of AML frameworks and the obstacles faced in their enforcement (Njagi, 2020). This historical backdrop is crucial for understanding the present state of AML compliance within the national commercial banking sector and the factors influencing its efficacy (Kegoro, 2019). Following this, the study delineates its research methodology, outlining the sampling approach, data collection methods, and analytical techniques deployed to examine the nexus between suspicious transaction reporting and financial performance (Creswell & Creswell, 2017). By offering transparency in the research process, this segment aims to bolster the credibility and rigor of the study's findings and conclusions (Njagi, 2020).

The remaining of the study is structured as follows...

1.1. Theoretical Underpinning

Drawing on structural theory, this study seeks to analyze the organizational structures and processes within commercial banks that influence their Anti-Money Laundering (AML) compliance efforts and subsequent financial performance (Borgman, 2007). Structural theory posits that organizations comprise interconnected elements forming a structure that shapes their behavior and outcomes (FATF, 2012). In the AML compliance context, structural theory underscores the significance of formalized systems, procedures, and reporting mechanisms for detecting and preventing money laundering activities. This study aims to uncover how organizational arrangements within commercial banks impact their ability to effectively report suspicious transactions, and, consequently, how these arrangements influence financial performance.

Furthermore, network theory offers insights into the relationships and interactions between various actors within the financial ecosystem, including banks, regulatory bodies, law enforcement agencies, and other stakeholders involved in AML compliance efforts (Brigham & Ehrhardt, 2020). According to network theory, the effectiveness of AML measures is contingent upon the strength and efficiency of the networks among these actors (Honiara, 2016). This study leverages network theory to elucidate how collaboration and information-sharing among commercial banks, regulatory authorities, and other relevant entities enhance the robustness of suspicious transaction reporting mechanisms, thereby improving financial performance (Isern & Porteous, 2020). By examining the network dynamics surrounding AML compliance in South Sudan's banking sector, the study aims to reveal the relational aspects that govern the effectiveness of suspicious transaction reporting and its impact on financial outcomes.

1.2. Background and Context

The issue of money laundering presents significant challenges to the stability and integrity of the financial sector, especially in regions experiencing economic transition and institutional weaknesses. South Sudan, which gained independence in 2011, exemplifies a nation striving to establish strong financial governance frameworks amid political instability and economic fragility (Kegoro, 2019). In this context, the effectiveness of anti-money laundering (AML) measures, particularly in suspicious transaction reporting, is crucial in maintaining the banking sector's integrity and promoting investor confidence.

In recent years, the South Sudanese banking industry has experienced increased regulatory scrutiny and international pressure to improve AML compliance standards. However, the implementation of AML regulations, including suspicious transaction reporting requirements, encounters numerous challenges. These include limited institutional capacity, widespread corruption, and political interference (Naylor, 2019). As a result, the effectiveness of AML measures in detecting and deterring money laundering activities remains in question, with

implications for the financial performance and stability of the country's commercial banks.

Money laundering in South Sudan is further aggravated by weak regulatory oversight, porous borders, and the presence of unchecked illicit financial networks (Njagi, 2020). Consequently, vulnerabilities that can be exploited by criminals seeking to launder illicit funds through the banking system have emerged. In response, regulatory authorities have prioritized enhancing AML compliance, particularly through improving suspicious transaction reporting mechanisms (Chen et al., 2019).

However, despite efforts and international assistance programs aimed at strengthening AML frameworks, difficulties persist in translating regulatory requirements into effective operational practices within commercial banks (McCathy, 2020). Challenges such as limited awareness and training among banking staff, inadequate technology infrastructure, and insufficient coordination between regulatory agencies and financial institutions impair the timely detection and reporting of suspicious transactions (Naylor, 2019). It is, therefore, necessary to investigate the relationship between suspicious transaction reporting and financial performance to understand the impact of AML compliance efforts on the banking sector's overall stability and viability.

The financial performance of commercial banks in South Sudan is closely connected to their ability to comply with AML standards while navigating the complexities of the local operating environment (Walker, 2007). Inadequate identification and mitigation of money laundering risks can lead to reputational damage, regulatory sanctions, and financial losses, jeopardizing banks' long-term sustainability (Naylor, 2019). Thus, understanding the dynamics of suspicious transaction reporting and its impact on financial performance is vital for guiding policy decisions, regulatory interventions, and risk management strategies within the banking sector.

2. Survey of Literature on Suspicious Transaction Monitoring and Financial Performance

2.1. The Importance of Suspicious Transaction Monitoring

Suspicious transaction monitoring is a pivotal element of anti-money laundering (AML) initiatives within the banking industry. This process systematically examines transactional data to pinpoint potentially illicit activities such as money laundering, terrorist financing, or other financial crimes (Kleemans et al., 2015). Effective monitoring systems are essential for financial institutions to detect and report suspicious transactions to regulatory authorities, thus fulfilling their legal obligations and protecting the financial system's integrity (Choo et al., 2017).

2.2. Technological Advances in Monitoring Systems

Technological advancements have significantly transformed suspicious transaction monitoring, enabling banks to employ data analytics, machine learning, and

artificial intelligence to improve detection capabilities (McCarthy et al., 2019). Automated systems can scrutinize extensive volumes of transactional data in real-time, helping banks to discern patterns, anomalies, and unusual behaviors that may indicate money laundering activities (Khan et al., 2018). The shift to technology-driven solutions, by minimizing manual intervention and boosting the efficiency of monitoring processes, has made such tools indispensable in the fight against financial crime.

2.3. Regulatory Frameworks and Compliance Requirements

Regulatory frameworks are pivotal in molding the design and implementation of suspicious transaction monitoring systems. Financial institutions are mandated to comply with strict requirements set forth by regulatory bodies, including the Financial Action Task Force (FATF). This compliance is crucial for effectively mitigating money laundering risks (Natarajan et al., 2016). The requirements encompass adopting risk-based approaches, executing customer due diligence measures, and implementing strong monitoring and reporting mechanisms (Griffin, 2018). Adhering to regulatory standards not only minimizes legal and reputational risks but also amplifies the effectiveness of Anti-Money Laundering (AML) efforts.

2.4. Challenges and Limitations of Monitoring Systems

Despite technological advancements and regulatory mandates, suspicious transaction monitoring systems face several challenges and limitations. False positives, where legitimate transactions are incorrectly flagged as suspicious, remain a persistent issue, leading to operational inefficiencies and resource wastage (Chen et al., 2019). Moreover, the evolving nature of financial crime necessitates the continuous adaptation and refinement of monitoring techniques to stay abreast of emerging threats (Kumar & Meena, 2019). Additionally, resource constraints, legacy systems, and data quality issues significantly inhibit the effectiveness of monitoring processes (Goyal & Bansal, 2017).

2.5. Linkages between Monitoring Effectiveness and Financial Performance

The effectiveness of suspicious transaction monitoring systems directly impacts the financial performance of banks. Efficient monitoring practices mitigate the risks associated with money laundering, thereby enhancing the institution's reputation, reducing regulatory penalties, and preserving shareholder value (Kleemans et al., 2015). Conversely, inadequate monitoring capabilities expose banks to legal liabilities, regulatory sanctions, and financial losses, adversely affecting profitability and shareholder confidence (Choo et al., 2017).

2.6. Empirical Evidence on Monitoring and Financial Performance

Empirical studies have examined the relationship between suspicious transaction

monitoring and financial performance in the banking sector. Research findings suggest a positive correlation between effective monitoring practices and profitability. Banks demonstrating strong Anti-Money Laundering (AML) compliance outperform their peers in terms of return on assets and return on equity (McCarthy et al., 2019). Furthermore, studies have underscored the pivotal role of monitoring efficiency in reducing operational costs, improving risk management, and enhancing overall financial stability (Khan et al., 2018).

2.7. Strategies for Enhancing Monitoring Effectiveness

To enhance the effectiveness of suspicious transaction monitoring, banks adopt multiple strategies, such as investing in technology infrastructure, training staff, and optimizing processes (Natarajan et al., 2016). Utilizing data analytics and machine learning algorithms can improve the accuracy and efficiency of these monitoring systems. This allows banks to more effectively identify suspicious activities (Griffin, 2018). Furthermore, collaboration with regulatory authorities, industry peers, and law enforcement agencies promotes information sharing and the exchange of best practices. This strengthens the collective response to financial crime (Chen et al., 2019).

2.8. The Role of Organizational Culture and Governance

Organizational culture and governance frameworks significantly influence the effectiveness of suspicious transaction monitoring in banks. A compliance-oriented culture, underpinned by solid governance structures, promotes a proactive stance on anti-money laundering (AML) risk management and motivates staff adherence to monitoring protocols (Kumar & Meena, 2019). Effective governance mechanisms, such as board oversight, risk committees, and internal controls, provide accountability and transparency in the execution of monitoring processes (Goyal & Bansal, 2017).

2.9. Literature Gap

The literature review provides a comprehensive overview of the importance, challenges, and empirical evidence surrounding suspicious transaction monitoring (STM) in the banking sector. However, a notable gap exists in the literature regarding the specific mechanisms through which STM effectiveness directly translates into financial performance metrics, such as return on assets and return on equity. While empirical studies suggest a positive correlation between STM and profitability, there is a lack of detailed analysis on the causal pathways and intervening variables that mediate this relationship. This research addressed this gap by providing a nuanced examination of the linkages between STM efficiency, financial performance indicators, and the underlying organizational factors that influence this relationship.

3. Methodology

This study employed a descriptive research design with a mixed-method ap-

proach to investigate the relationship between anti-money laundering (AML) compliance, focusing specifically on suspicious transaction reporting, and the financial performance of selected commercial banks in South Sudan.

3.1. Sampling Procedure

A total of 105 participants from four selected commercial banks were sampled for the study. Purposive sampling was utilized to ensure representation from diverse banking institutions operating within the South Sudanese financial landscape.

To ensure the adequacy of the sample size in representing the targeted population, the Yamane formula was employed. The Yamane formula is particularly suitable for determining sample sizes in large populations. Given a population size (N) of 144 individuals and a desired margin of error (e) of 5% (0.05), the Yamane formula was applied as follows:

$$n = \frac{N}{1 + N(e)^2}$$

where, n = Sample size, N = Population size, e = margin of error at 95% confidence level and e = Margin of error/0.05.

3.2. Data Collection

Both quantitative and qualitative data were collected to provide comprehensive insights into the research phenomenon. The survey questionnaire, containing structured questions relating to each variable, was delivered to the participants. Respondents recorded their answers within specified options, allowing for systematic data collection (Creswell & Creswell, 2017). Additionally, semi-structured interviews were conducted by the researcher to gather in-depth insights from targeted individuals, further supplementing the quantitative findings obtained through the survey (Creswell & Plano Clark, 2018).

3.3. Instrumentation

The survey questionnaire, designed to capture relevant information on AML compliance practices, suspicious transaction reporting mechanisms, and financial performance indicators, was formulated based on established theoretical frameworks and prior research literature. The questionnaire was pre-tested to ensure clarity, relevance, and appropriateness for the study context (Babbie, 2016).

3.4. Data Analysis

Quantitative data from the survey questionnaire were analyzed using linear regression analysis to establish the influence of AML compliance, specifically suspicious transaction reporting, on financial performance. Statistical software facilitated regression analysis, enabling examination of the relationship between variables and determination of statistical significance (Field, 2018).

3.5. Integration of Quantitative and Qualitative Data

The integration of quantitative and qualitative data allowed for a holistic understanding of the research phenomenon. Quantitative findings from the survey questionnaire were triangulated with qualitative insights obtained through semi-structured interviews. This triangulation enhanced the validity and reliability of the study findings by corroborating quantitative trends with qualitative narratives (Creswell & Creswell, 2017).

3.6. Ethical Considerations

Ethical guidelines were adhered to throughout the research process to ensure the protection of participants' rights and confidentiality. Informed consent was obtained from all participants prior to data collection, and measures were implemented to safeguard the anonymity and privacy of respondents. The study was conducted according to ethical standards and guidelines set forth by relevant regulatory bodies and institutional review boards (Bryman, 2016).

3.7. Reliability Test of the Instruments

Cronbach's Alpha was used to test the reliability of the instrument. The Cronbach's alpha coefficients of all variables were more significant than 0.70, which means the instrument for this research is reliable.

4. Discussion of Results

Response rate

In **Table 1** below, result show that out of the 90 questionnaires distributed, only 86 filled questionnaires were returned while 15 interviews were planned however, only 11 were conducted. The overall response rate was 92.3%.

4.1. Background Information of Respondents

Most respondents were female forming 59.0%. The remaining 41.0% were male. The average age of the respondents was 41.1 years. In terms of level of education, the highest number of respondents had master's level forming 40.2%, whereas 30.9% had bachelors' degree, 11.5% had other education levels particularly professional body courses such as ACCA, Financial Intelligence while 12.3% had certificates.

In line with the descriptive statistics in **Table 2**, the qualitative data submissions

Table 1. Response rate.

	Targeted Number	Valid Instruments	Percentage
Questionnaires	90	86	88.6
Interviews guides	15	11	11.4
Total	105	97	92.3

Source: Primary data, 2024.

about adherence to suspicious transaction monitoring related to the Financial Intelligence Unit (FIU) were that;

“We can surely say that commercial banks still face challenges in achieving consensus on reporting standards, and it underscores the need for a more nuanced and collaborative approach in developing international financial reporting frameworks”

Exploring the understanding of red flags by all bank staff, in one of the interview sessions, it was stated that;

“Our banking sector has ongoing challenges in ensuring a universal and deep understanding of red flags among staff. We are still working on continuous training and awareness programs to address the identified gaps and enhance the effectiveness of the entire team in identifying suspicious transactions”

When it came to examining resources for efficient reporting, a key respondent mentioned that;

Table 2. Descriptive statistics of internal policies.

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
Banks have mechanisms for early detection and reporting of suspicious transactions to prevent financial crimes.	7	8.1	10	11.6	13	15.1	37	43.0	19	22.1	3.593
There is uniformity in reporting standards to enhance international cooperation.	29	33.7	28	32.6	10	11.6	7	8.1	12	14.0	2.360
There is timely reporting of suspicious transactions to comply with legal and regulatory requirements.	17	19.8	39	45.3	8	9.3	12	14.0	10	11.6	2.523
All bank staff understanding red flags of suspicious transactions.	8	9.3	12	14.0	36	41.9	12	14.0	18	20.9	3.232
Bank easily manage large volumes of suspicious transaction reports.	22	25.6	42	48.8	5	5.8	11	12.8	6	7.0	2.267
Banks ensure prompt sharing of reports among regulatory authorities.	27	31.4	37	43.0	2	2.3	10	11.6	10	11.6	2.290
Banks smoothly collaborate with regulatory authorities in sharing suspicious transactions.	16	18.6	50	58.1	3	3.5	8	9.3	9	10.5	2.348
Bank customers effectively comply to reporting suspicious transactions to respective authorities.	25	29.1	31	36.0	6	7.0	14	16.3	10	11.6	2.453
Banks have adequate resources for efficient suspicious transactions reporting.	33	38.4	20	23.3	10	11.6	18	20.9	5	5.8	2.325
Banks keep up with all emerging trends of money laundering with vigilance.	7	8.1	12	14.0	9	10.5	15	17.4	43	50.0	3.872

Source: Primary data, 2024.

“From my experience in the industry, these results mirror a growing concern The lack of adequacy of resources signals a real challenge that requires immediate attention and strategic resource allocation within the sector”.

4.2. Regression Analysis

Regression analysis was used to evaluate whether suspicious transaction reporting have a significant influence on financial performance in selected commercial banks in South Sudan. The coefficient of determination (R Square) under regression analysis is presented in table in **Table 3**.

Table 3 shows Pearson’s correlation coefficient (R = 0.680), Coefficient of determination or R Square of 0.462 and Adjusted R Square of 0.451. An adjusted R Square of 0.451 means that suspicious transaction reporting accounts for 45.1% of the variance in financial performance in commercial banks in South Sudan. This means that apart from suspicious transaction reporting there are other factors that contribute to financial performance in commercial banks in South Sudan.

The results in **Table 4** present results aimed at establishing whether suspicious transaction reporting is a predictor of financial performance in commercial banks in South Sudan and determine the magnitude to which suspicious transaction reporting influences financial performance in commercial banks in South Sudan, Standardized Beta and *t* Coefficients were generated. For the magnitude to be significant the decision rule is that the *t* value must not be close to 0 and the *p*-value must be less than or equal to 0.05. Since the *t*-value of 6.555 is not close to 0 and *p*-value < 0.05 (=0.000), the study confirmed that suspicious transaction reporting is a predictor of financial performance in commercial banks in South Sudan. A standardized Beta coefficient of 0.680 means; every 1-unit increase in suspicious transaction reporting will lead to an increase of 0.680 units of financial performance in commercial banks in South Sudan.

Table 3. Model Summary for suspicious transaction monitoring and financial performance.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.680 ^a	0.462	0.451	0.66145

a. Predictors: (Constant), Suspicious transaction monitoring.

Table 4. Coefficients^a for suspicious transaction monitoring and financial performance.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.992	0.351		5.678	0.000
1 Suspicious Transaction Monitoring	0.547	0.083	0.680	6.555	0.000

a. Dependent variable: Financial performance.

5. Conclusion

In summary, this study reveals a significant and meaningful relationship between suspicious transaction reporting and financial performance in commercial banks in South Sudan. The moderate positive correlation, coupled with its statistical significance, indicates that improvements in suspicious transaction reporting practices are associated with positive changes in financial performance. The identified predictors, accounting for 45.1% of the variance observed in financial performance, underscore the substantial impact of vigilant transaction monitoring on the overall financial health of banks.

The implications of these results for the banking sector in South Sudan are profound. Banks should recognize the instrumental role of suspicious transaction reporting as a predictor for financial performance. Investments in strengthening and optimizing transaction monitoring systems, employee training, and collaboration with regulatory bodies become imperative for sustained financial success. This aligns with global trends where financial institutions are increasingly under scrutiny to enhance their anti-money laundering measures to ensure financial integrity.

The identified predictors for financial performance highlight the need for ongoing vigilance and adaptation within the banking sector. As financial crimes and money laundering tactics evolve, banks must stay ahead by continuously enhancing their suspicious transaction reporting mechanisms. This involves not only the adoption of advanced technologies but also fostering a culture of compliance and awareness among bank employees.

In conclusion, the study's findings offer valuable insights into the interplay between suspicious transaction reporting and financial performance in the context of South Sudanese commercial banks. The implications suggest a strategic imperative for banks and regulatory bodies to collaborate in fortifying transaction monitoring practices. By doing so, the banking sector can contribute to a more secure and resilient financial environment in South Sudan, aligning with global efforts to combat financial crimes and ensure the stability of the banking sector.

6. Recommendations

6.1. Financial Intelligence Unit (FIU) Department

Establish a dedicated unit within the FIU Department responsible for continuous improvement in suspicious transaction reporting processes. This unit should focus on refining detection algorithms, ensuring real-time monitoring, and promptly escalating potential issues.

6.2. Risk Management and Compliance Department

Direct the Risk Management and Compliance Department to conduct regular assessments of the effectiveness of suspicious transaction reporting. This includes evaluating the accuracy of reporting, minimizing false positives, and op-

timizing the overall risk detection strategy.

6.3. Technology and Innovation Division

Empower the Technology and Innovation Division to explore cutting-edge technologies for suspicious transaction reporting. Invest in artificial intelligence and machine learning tools to enhance the sophistication and accuracy of transaction monitoring, thereby reducing the risk of financial irregularities.

6.4. Customer Support and Education Team

Establish a Customer Support and Education Team to educate clients on the importance of accurate transaction reporting. Promote awareness campaigns to encourage customers to report suspicious activities, fostering a collaborative approach in maintaining financial integrity.

6.5. Legal and Compliance Oversight Committee

Form a Legal and Compliance Oversight Committee responsible for ensuring that suspicious transaction reporting practices align with local and international regulations. This committee should conduct periodic reviews to guarantee compliance with evolving legal standards.

6.6. Operational Risk Management Unit

Task the Operational Risk Management Unit with regularly assessing the operational impact of suspicious transaction reporting. This includes evaluating the efficiency of reporting processes and minimizing any disruptions to normal banking operations.

6.7. External Audit Engagement Team

Engage an External Audit Engagement Team with expertise in AML compliance to conduct periodic reviews of suspicious transaction reporting practices. External audits bring an independent perspective, validating the effectiveness of internal processes and suggesting areas for improvement.

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