

Transaction Monitoring Effect on Profitability of Commercial Banks in Kenya

¹Obed Kipkirui Terer, ²Lucy Wamugo Mwangi, ³Job Omagwa
^{1,2,3}Department of Finance and Accounting, Kenyatta University
Corresponding Email: obedterer@gmail.com

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Abstract

Commercial banks' performance is fundamental to the economy as providers of financial services. In offering this service, commercial banks are exposed to a range of risks that negatively affect financial position and ultimately influence profitability. Profitability is indicative of a bank's stability and potential for growth. Enhancing commercial banks' profitability contributes to shareholder return on investment. In June 2018, five banks were fined a total of Kshs. 392 million by the Central Bank of Kenya for breaching anti-money laundering regulations. Consequently, banks had to invest resources to improve their anti-money laundering measures. Consequently, raising operational and compliance overheads. This study sought to determine the effect of transaction monitoring on profitability of commercial banks in Kenya. The research employed an explanatory research design. The targeted population comprised all the thirty-nine regulated commercial banks as of December 31, 2021. The study period was eight (8) years (2014 to 2021). Respondents were chosen through purposive sampling. Primary data was gathered using structured questionnaires, while secondary data was derived from audited financial reports of commercial banks and the annual banking supervision report from the Central Bank of Kenya. Subsequently, the collected data underwent analysis employing descriptive statistics and regression analysis. The research results disclosed that transaction monitoring positively and significantly influenced commercial banks profitability. Consequently, bank managers should incorporate transaction monitoring into their operations to augment the overall efficacy to detect and report potentially suspicious activities, and to strengthen operational controls.

Keywords: *Transaction Monitoring, Profitability, Commercial Bank*

1.0 Introduction

Commercial banks have a crucial global economic role by aiding the efficient allocation of resources and as intermediaries transferring funds from surplus sectors to sectors in need of funding (Ongore, 2013). Saona (2011) revealed that a stable and effective financial system enhances banks' profitability by providing more investment funds. Therefore, promoting economic growth by directing savings to productive economic sectors (Alkhazaleh & Almsafir, 2014). However, limited risk management measures make commercial banks susceptible to money laundering risks, which can impair profitability, particularly those with limited resources (Kimani, 2018). Consequently, prioritizing profitability is crucial for commercial banks to fulfill their responsibilities and ensure sustainability (Odhiambo, 2019).

According to Levine (1997), stability of the commercial banks is determined by their ability to efficiently perform their economic functions, including, deposit taking, allocating savings, facilitating trade, managing risk, and promoting economic growth through the provision of credit to private enterprises. Tariq *et al.* (2014) highlight the significance of profitability in ensuring the smooth operation of businesses within today's fiercely competitive environment and its direct influence on profitability. Furthermore, Alkhazaleh & Almsafir (2014) argue that the banking industry's prosperity closely relates to the global economy's overall well-being. Correspondingly, Adeusi *et al.* (2014) indicated that commercial banks are measured by inspecting the reported profits in a specific financial year. Therefore, a profitable bank should afford returns to shareholders, improve risk management, and favorably contribute to the financial system's overall equilibrium (Athanasoglou *et al.*, 2008).

Historically, Kenyan commercial banks have been profitable (Oloo, 2008). However, in recent years, their performance has been inconsistent, as demonstrated by their fluctuating pre-tax profits. The lowest levels were recorded in 2015, 2017, and 2020, at Kshs. 134.0 billion, Kshs. 133.2 billion, and Kshs. 112.1 billion, respectively. Return on assets and equity have also shown mixed performance, with a decreasing trend from 2014 to 2017, followed by an increase in 2018, and a decrease in 2019. These trends are not desirable, given the reforms implemented to improve commercial bank performance. Al-Qudah and Jaradat (2013) point out that the operating environment for commercial banks is constantly changing, with profitability being crucial for their financial well-being.

Anti-money laundering (AML) practices are strategies implemented to prevent occurrence of money laundering (Barry, 2002). The primary intention of AML practices is the detection, mitigation, and obstruction of activities associated with money laundering and to ensure the stability and integrity of financial institutions (Yeandle *et al.*, 2005). Commercial Banks have been impacted by money laundering practices (Raweh *et al.*, 2017). World Bank (2006) highlights the difficulty of detecting, preventing, and prosecuting money laundering as a major global concern. Money laundering practices fuel criminal activities, reduce tax collections, and increase the shadow economy leading to the infiltration by financial crime (Hendriyetty & Grewal, 2017). Preventing money laundering involves deploying various practices including customer due diligence, monitoring of transactions, conducting training, and audits to identify, obstruct, and eliminate money laundering-related activities (Rocha, 2011).

Transaction monitoring entails the examination of customer transaction behavior using predetermined criteria, which can be done either manually or electronically, to verify its consistency with the customer's profile (Basel Committee on Banking Supervision, 2017). Accordingly, Banks have a responsibility not only to verify the identity of their clients but also to keep an eye on their account transactions and identify any activities deviating from the expected activities associated with a specific customer or type of account (Basel Committee on Banking Supervision, 2001). Therefore, the most effective way to address money laundering is by implementing a transaction monitoring program to detect any abnormal patterns that could potentially facilitate money laundering (Mugarura, 2011). The CBK Risk Management Guidelines (2013) mandate commercial banks to set up a mechanism that can detect and report any indications of money laundering at the start of a transaction or activity.

1.1 Problem Statement

Njung'e (2019) maintains that commercial banks are institutions established on profit-making strategy to enhance shareholder value while contributing to economic growth. The Kenyan economy is heavily reliant on the banking sector, and its failure negatively affects the entire

economy (Kamau, 2009). As a result, commercial banks face a heightened level of money laundering risk compared to other enterprises, potentially causing adverse impacts on their profitability (Adeusi, Kolapo & Aluko, 2014). This process can be costly and resource-intensive, and it may not always directly align with the actual risk of money laundering (KPMG, 2014; Geiger & Wuensch, 2007).

Kalungu (2008) acknowledges that the main drive of setting up a business enterprise is profit-making and that commercial banks are no exception. Shareholders believe that profitability is an indicator of success for commercial banks. However, over the past eight years (2014-2021), commercial banks in Kenya have experienced a decline in profitability, which has led to fluctuating ROA and ROE. In 2017, commercial banks reported a reduced profit before tax of Kshs. 133.2 billion compared to Kshs. 147.4 billion in 2016 (Central Bank of Kenya, 2017).

Numerous studies have investigated the link between anti-money laundering practices and the profitability of commercial banks, both locally and globally in contexts. For instance, Idowu and Obasan (2012) analyzed the impact of anti-money laundering policy on the financial performance of institutions in Nigeria. Khrawish (2014) examined the influence of AML on funding investments in Jordanian financial institutions. Wario (2013) conducted an assessment of efficacy of AML regulations. The research concentrated on two Tanzanian banks, namely CRDB and NBC. Similarly, Comney (2019) explored the connection between Ghanaian commercial banks' performance and AML laws. However, these studies were conducted in different places outside of Kenya. Therefore, cannot be applied directly to commercial banks in Kenya. Moreover, many of these studies solely focused on a single metric of financial performance, ignoring other ROA and ROE as profitability measures. This study sought to determine the effect of Transaction Monitoring on profitability of commercial banks in Kenya.

1.2 Research Hypothesis

H₀: Transaction monitoring does not statistically affect the profitability of commercial banks in Kenya.

2.0 Literature Review

2.1 Theoretical Review

2.1.1 Transparency-Stability Theory

Tadesse (2006) advanced this theory. He argues that enhanced financial management transparency can lead to improved resource allocation and reduced information asymmetry. This theory suggests that greater transparency can improve overall stability in financial systems. Hancher and Moran (1989) submit that regulations should be implemented in both the government and the private sectors to promote transparency and accountability. Similarly, Schott (2006) emphasized the importance of transparent regulatory measures in combating money laundering.

Mitch *et al.* (2007) suggests that nations that have regulated transparency in their banking system and disclosure of information are less prone to experiencing financial crises. Smellie (2004) concludes that the fight against illegal activities cannot be successful without the clear implementation of regulatory measures. Therefore, Olasanmi (2010) asserts that regulatory bodies should be the first to disclose information to the public through enforcement actions. Watts and Zimmerman (1986) argue that because taxpayers support central banks, the information they possess should be accessible to the public. Moreover, Yeandle *et al.* (2005) underline the fact that banks that offer thorough disclosures are upholding the public's entitlement to knowledge.

According to Mugo (2015), disclosing information can help minimize financial crimes, but this idea conflicts with the transparency-fragility theory, which suggests that disclosing too much information could signal instability in the banking sector and lead to negative consequences such as bank runs or increased criminal activity. However, when it comes to money laundering, criminals seek to avoid detection and seizure of their illicit funds. In this case, disclosure can help reduce the risks of seizure and forfeiture, and enable criminals to profit from their crimes. On the other hand, the transparency-stability theory supports the idea that sharing information can help fight against money laundering ultimately improving Banks' profitability. The theory highlighted a link between transaction monitoring and the profitability of banks.

2.2 Empirical Review

Nakate (2018) investigated how Uganda's commercial banks were affected by the anti-money laundering Act. Both doctrinal and empirical methodologies were employed in the investigation. According to the report, the act influences banks in both favorable and unfavorable aspects. The improved transaction screening and higher standard of customer identification were the main beneficial effects. The bank's spending increased, leading to a heightened level of complexity in the regulatory landscape for banks. The key focus is the AML act amongst Uganda's banks. The study was replicated in Kenya.

Mohamud (2017) investigated the impact of risk management in anti-money laundering on the financial performance of commercial banks and His conclusions indicated a negative correlation between the implementing cost of anti-money laundering and financial performance. Hence, expenses linked to measures against money laundering increased following the enactment of anti-money laundering legislation. In the current research, an examination was conducted on the profitability, and a moderating variable was introduced to assess its impact on the variables.

Oketch (2008) assessed risk posed by money laundering, the case of the Standard Chartered Bank. The descriptive statistic method was used to analyse the data and establish significant adverse effects on profitability resulting from the expenses linked to money laundering. Only Standard Chartered Bank was studied. Hence, the findings cannot be applied to all Kenyan commercial banks as a whole. The previous research concentrated on a particular bank, whereas the present study examined all commercial banks operating in Kenya.

Sainah (2015) evaluated the impact of AML risk assessments on the performance of commercial banks based in Kenya while correlation and multiple regression analysis was deployed to evaluate financial performance using return on asset metric. Results showed that cost related to anti-money laundering staff and transaction monitoring were negatively correlated with return on assets, the assessment did not examine the impact of moderation.

3.0 Methodology

The research employed an explanatory research design. The targeted population comprised all the thirty-nine regulated commercial banks as of December 31, 2021. The study period was eight (8) years (2014 to 2021). Respondents were chosen through purposive sampling. Primary data was gathered using structured questionnaires, while secondary data was derived from audited financial reports of commercial banks and the annual banking supervision report from the Central Bank of Kenya. Subsequently, the collected data underwent analysis employing descriptive statistics and regression analysis.

4.0 Results and Discussion

4.1 Descriptive Analysis

Transaction Monitoring

Table 1 exhibits Transaction Monitoring descriptive analysis findings.

Table 1: Transaction Monitoring

Statement N=77	SD	D	N	A	SA	M	Std dev
The process of monitoring transactions involves operational controls aimed at identifying and reporting potentially suspicious activity.	0.0%	7.8%	18.2%	44.2%	29.9%	4.0	0.9
Cash reporting threshold set at USD 10,000 no matter if the transactions are dubious or not, impacts the accuracy and quality of suspicious transactions	15.6%	10.4%	0.0%	19.5%	54.5%	3.9	1.5
The fear of facing penalties and fines for not disclosing suspicious transactions has an impact on the accuracy of the reports that are provided to regulatory bodies	2.6%	1.3%	1.3%	55.8%	39.0%	4.3	0.8
The success of transaction monitoring is influenced by the cost involved in implementing a robust monitoring system	5.2%	11.7%	9.1%	3.9%	70.1%	4.2	1.3
Progresses in transaction monitoring have been bolstered by the efficacy of anti-money laundering practices.	5.2%	9.1%	10.4%	22.1%	53.2%	4.1	1.2
Overall mean						4.1	1.1

Table 1 shows a noteworthy number of respondents agreed that transaction monitoring includes implementing operational controls to detect and report potentially suspicious actions (mean = 4.0), a cash reporting threshold set at USD 10,000 no matter if the transactions are dubious or not, impact the accuracy and quality of suspicious transactions (mean=3.9), and fear of facing penalties and fines for not disclosing suspicious transactions have an impact on the accuracy of the reports that are provided to regulatory bodies (mean=4.3). Further, the respondents agreed that success of transaction monitoring is influenced by the cost involved in implementing a robust monitoring system (mean=4.2), and anti-money laundering practices have become more effective due to enhancements in transaction monitoring. (mean=4.1). The mean score of 4.1 indicates a consensus among most respondents regarding the significance of transaction monitoring as a key AML practice in amplifying profitability. Additionally, deviations from mean were relatively minor, as demonstrated by a standard deviation of 1.1.

Profitability of commercial banks

Descriptive analysis results of profitability are illustrated in Table 2.

Table 2: Profitability of commercial banks

Statement N=77	SD	D	N	A	SA	M	Std dev
Profit before tax	0.0%	13.0%	2.6%	63.6%	20.8%	3.9	0.9
Total assets	5.2%	23.4%	3.9%	32.5%	35.1%	3.7	1.3
Net income	3.9%	31.2%	6.5%	24.7%	33.8%	3.5	1.3
Shareholders' equity	2.6%	10.4%	2.6%	57.1%	27.3%	4.0	1.0
Overall mean						3.8	1.1

Table 2 findings demonstrate that a significant number of respondents noted an improvement in profit before tax (mean=3.9), total assets (mean=3.7), net income (mean=3.5), and shareholders' equity (mean=4.0).

Table 3: Profitability

	N	Mean	Std. Deviation	Minimum	Maximum
ROA	304	1.432	4.52	-32.2	7.26
ROE	304	13.267	14.82	-37.7	82.1

Table 3 demonstrates that commercial banks reported an annual average performance of 1.432 percent in terms of return on assets over the measurement period (2014-2021). Further, the banks reported an annual average performance of 13.267 percent in terms of return on equity over the measurement period.

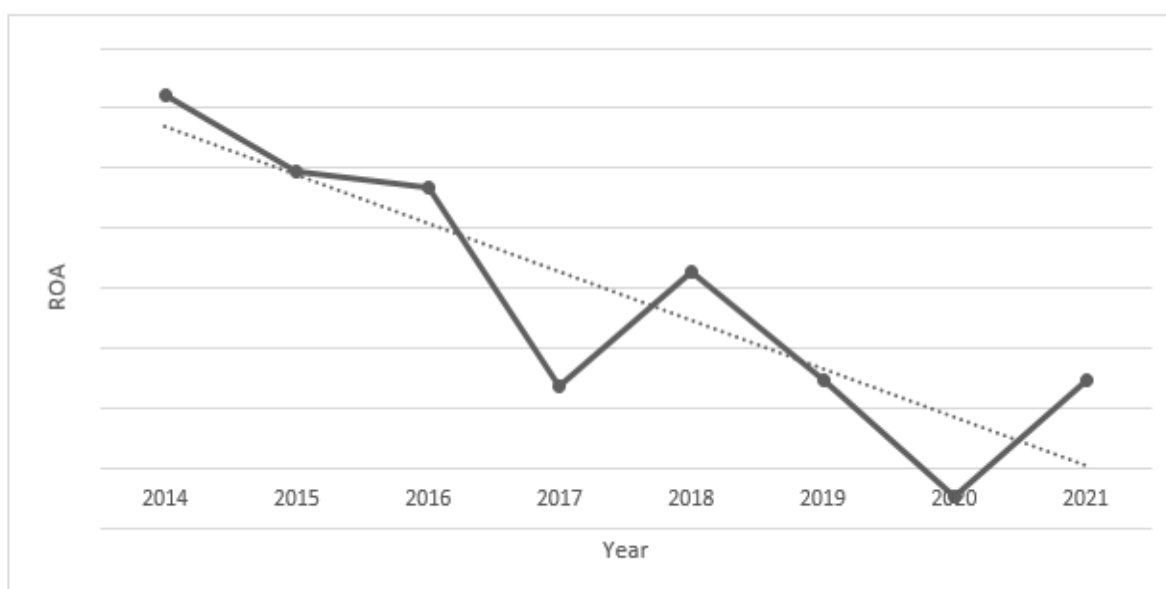


Figure 1: Return on Assets Trends

Figure 1 illustrates the trajectory of profitability of commercial banks in Kenya, the return on assets graph displays a declining curve, signifying a decline in return on assets over the

analyzed periods. Specifically, the ROA declined from 2014 to 2017, and experienced an increase in 2018, followed by another decrease in 2019, ultimately reaching its lowest point in 2020.

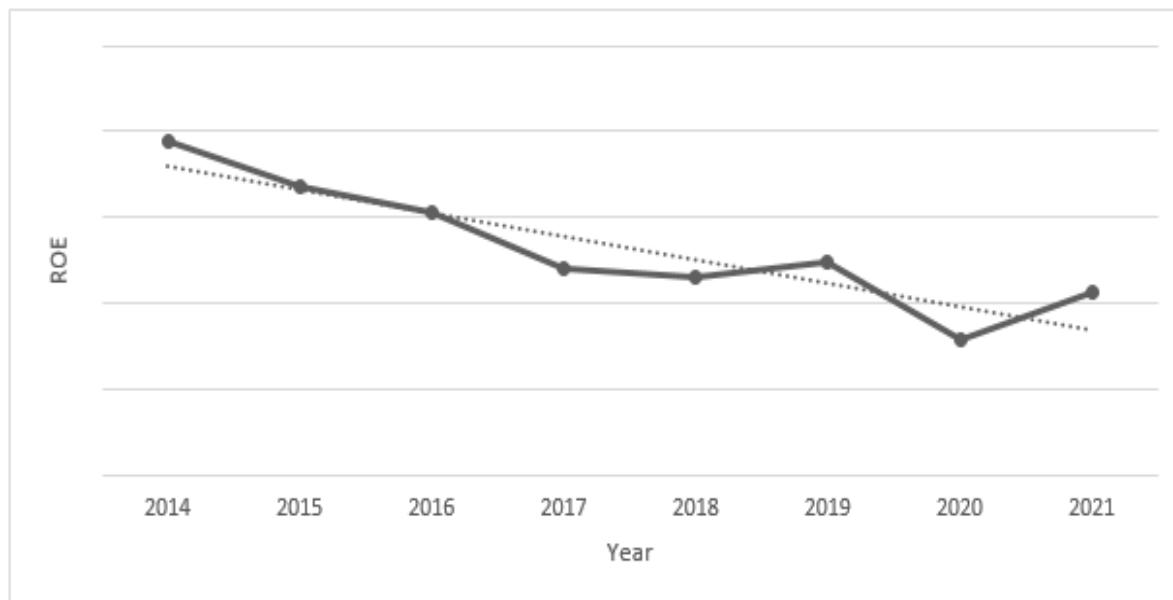


Figure 2: Return on Equity Trends

Figure 2 illustrates the patterns in profitability as assessed through return on equity. The diagram depicts a downward trend indicating that overall, commercial banks’ return on equity has been declining over the measurement period. The ROE declined from 2014 to 2017, increasing in 2018 before dropping again in 2019 and 2022.

4.2 Correlation Analysis

Table 4 presents the results of a correlation analysis.

Table 4: Correlation Analysis

N = 77		Profitability	Transaction monitoring
Profitability	Pearson Correlation	1	
	Sig. (2-tailed)		
Transaction Monitoring	Pearson Correlation	.731**	1
	Sig. (2-tailed)	.000	

** Correlation is significant at the 0.01 level (2-tailed).

Transaction monitoring and commercial bank profitability showed a positive and significant connection ($r=.731$, $p\text{-value}<.000$). This indicates that a shift in transaction monitoring is associated with substantial changes in the profitability of commercial banks in the same direction.

4.3 Regression Analysis

Table 5 indicates the regression coefficient of transaction Monitoring and commercial banks’ profitability.

Table 5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-0.241	0.304		-0.792	0.431
Transaction monitoring	0.375	0.081	0.348	4.642	0.000

a Dependent Variable: Profitability

Results in Table 5 demonstrate that transaction monitoring significantly and positively influences profitability ($\beta = .375$, $p\text{-value} = .000 < .05$). This designates that a profitability increase of 0.375 units corresponds to a one-unit rise in transaction monitoring. Hence, the null hypothesis (H_0) indicating transaction monitoring does not statistically affect the profitability of commercial banks in Kenya is rejected. The findings support the assertion by Nakate (2018) that improved transaction screening and higher standards of customer identification enhance performance. However, the findings are inconsistent with the study by Sainah (2015) who established that AML's cost of monitoring transactions negatively correlated with return on assets.

5.0 Conclusion

The study's second aim was to examine how transaction monitoring affects the profitability of commercial banks. Research revealed transaction monitoring has a significant and positive influence on profitability in Kenyan commercial banks. Correlation analysis also demonstrated a strong and positive relationship between transaction monitoring and the profitability of commercial banks. This suggests that transaction monitoring is fundamental in preventing money laundering and is significant in enhancing the banks' profitability. Important areas of emphasis in transaction monitoring encompass the examination of transactions, handling cash, and reporting suspicious transactions in compliance with regulations.

6.0 Recommendations

The research indicated that effective transaction monitoring has a substantial and positive effect on profitability. Consequently, bank managers should incorporate transaction monitoring into their operations to augment the overall efficacy of detecting and reporting potentially suspicious activities, and to strengthen operational controls. By doing so, the bank minimizes the potential negative impacts from illegal money movement ultimately improving the efficiency of their anti-money laundering practices. Therefore, full implementation of transaction monitoring is recommended focusing on strengthening its transaction monitoring practices and ensuring quality suspicious transaction reporting.

References

- Adeusi, S. O., Kolapo, F. T., & Aluko, A. O. (2014). Determinants of commercial banks' profitability panel evidence from Nigeria. *International Journal of Economics, Commerce and Management*, 2(12), 1-18.
- Alkhazaleh, A. M. & Almsafir, M. (2014). Bank Specific Determinants of Profitability in Jordan. *Journal of Advanced Social Research*, 4(10), 01-20.
- Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific, and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money*, 18(2), 121-136.

- Barry, E., (2002). An Eve on Russia. Monthly Review, Ernst & Young. Moscow.
- Basel Committee on Banking Supervision (2017). *Guidelines: sound management of risks related to money laundering and financing of terrorism*.
- Central Bank of Kenya (2017). Banking sector annual report, Retrieved from Government Press
website: https://www.centralbank.go.ke/uploads/banking_sector_annual_reports/831171133_2016%20Annual%20Report.pdf
- Commey, B. O., (2019). *Anti-Money Laundering Compliance and Performance of Commercial Banks in Ghana*. (Unpublished Thesis, University of Ghana)
- Geiger, H., & Wuensch, O. (2007). The fight against money laundering: An economic analysis of a cost-benefit paradoxon. *Journal of Money Laundering Control*, 10(1), 91–105.
- Hancher, L., & Moran, L. (1989), *Organizing regulatory space. Capitalism, Culture, and Economic Regulation*, Oxford University Press, Oxford, pp. 271-274.
- Hendriyetty, N. and Grewal, B.S. (2017), “Macroeconomics of money laundering: effects and measurements”, *Journal of Financial Crime*, Vol. 24 No. 1, pp. 65-81.
- Idowu, A., & Obasan, K. A. (2012). Anti-money laundering policy and its effects on bank performance in Nigeria. *Business Intelligence Journal*, 6(3), 367-373.
- Kalungu, S. V. (2012). *Impact of Corporate Governance Practice on Financial Performance of the Banking Industry in Kenya*. (Unpublished MBA Project, University of Nairobi).
- Kamau, A. W. (2009). *Efficiency in the banking sector: An empirical investigation of commercial banks in Kenya*. (Doctor of Philosophy thesis, University of Nairobi).
- Khrawish, H. A. (2014). The impact of anti-money laundering on investment funding: Evidence from Jordanian financial institutions. *International Journal of Economics and Finance*, 6(3), 227-238.
- KPMG (2014), *Global Anti-Money Laundering survey 2014*.
- Levine, R. (1997). Financial development and economic growth: views and agenda. *Journal of Economic Literature*, 35(2), 688-726.
- Mohamed, A. M. (2017). *Effect of Anti-Money Laundering Risk Management on Financial Performance of Commercial Banks in Kenya* (Unpublished MBA Project, University of Nairobi).
- Mugarura, N. (2011), “The global anti-money laundering court as a judicial and institutional imperative”, *Journal of Money Laundering Control*, Vol. 14 No. 1, pp. 60-78.
- Nakate Nabuuma Mai, S. (2018). *Critical analysis of the impact of the anti-money laundering act on commercial banks in Uganda* (Doctoral dissertation, Kampala International University).
- Njung’o, P. W. (2019). *Role of Internal Audit Function on Financial Performance of the Listed Commercial Banks in Kenya in the Period 2013-2017*. (Unpublished Master of Business Administration, United States International University-Africa)
- Oloo, O. (2008). *The Banking Survey Kenya*. Nairobi: Think Business.
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of financial performance of commercial banks in Kenya. *International journal of economics and financial issues*, 3(1), 237-252.

- Raweh, B. A., Erbao, C., & Shihadeh, F. (2017). Review the literature and theories on anti-money laundering. *Asian Development Policy Review*, 5(3), 140-147.
- Rocha, M. (2011), *Basic Concepts Regarding Financial Crime and Compliance: AML/CFT System – Strategy and Actors*, Dissertation Workshop, Session 3, Universidade Católica Portuguesa.
- Sainah, R. C. (2015). *The effect of anti-money laundering risk assessment on the financial performance of commercial banks in Kenya*. (Unpublished MBA Project, University of Nairobi).
- Saona Hoffmann, P. R. (2011). Determinants of the Profitability of the US Banking Industry. *International Journal of Business and Social Science*, 2(22), 255 – 269.
- Schott, P.A. (2006). *Reference Guide to Anti-Money Laundering and Combating the Financing of Terrorism*, 2nd Edition and Supplement on Special Recommendation IX, The International Bank for Reconstruction and Development/The World Bank/ The International Monetary Fund
- Smellie, A. (2004). Prosecutorial challenges in freezing and forfeiting proceeds of transnational crime and the use of international asset sharing to promote international cooperation. *Journal of Money Laundering Control*. Vol. 8 No. 2, p. 104.
- Tadesse, S. (2006). The economic value of regulated disclosure: Evidence from the banking sector. *Journal of Accounting and Public Policy*, 25(1), 32-70.
- Tariq, W., Usman, M., Mir, H. Z., Aman, I., & Ali, I. (2014). Determinants of commercial banks profitability: Empirical evidence from Pakistan. *International Journal of Accounting and Financial Reporting*, 4(2), 1-22.
- Wario, A. H. (2013). *An assessment of adherence and effectiveness in the anti-money laundering regulations among banking institutions in Tanzania*. (Unpublished Master of Business Administration in Finance, Open University of Tanzania).
- Watts, R. L., & Zimmerman. J. L. (1986). *Positive Accounting Theory*. Prentice Hall, Inc., Englewood Cliffs.
- World Bank (2006). *Reference Guide to Anti-Money Laundering and Combating the Financing of Terrorism*, 2nd ed. World Bank: Washington.
- Yeandle, M., Mainelli, M., Berendt, A., & Healy, B. (2005). Anti-Money Laundering Requirements: Costs, Benefits & Perceptions. *Anti-Money Laundering Requirements-Z/Yen Group*.