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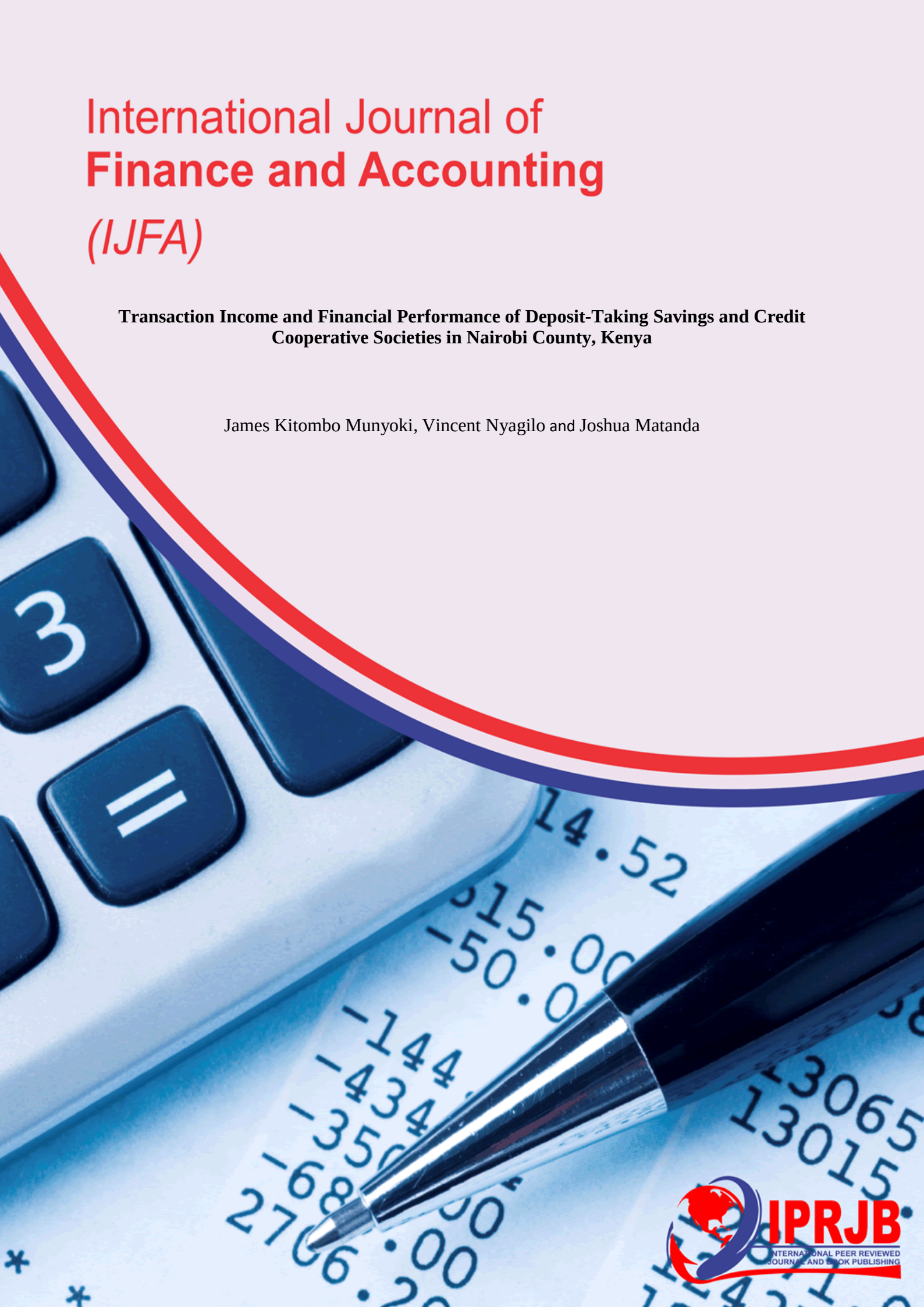

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Transaction Income and Financial Performance of Deposit-Taking Savings and Credit Cooperative Societies in Nairobi County, Kenya

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Abstract

Purpose: Deposit-taking Savings and Credit Co-operative Societies in Kenya are important due to the role they play in financial intermediation. The deposit-taking SACCOs pool members' deposits and issue loans to them at a predetermined rate of interest. The financial performance of deposit-taking SACCOs is highly dependent upon the interest income they receive from loans. Consequently, diversification by deposit-taking SACCOs into non-interest income has steadily been demanded due to the need for financial institutions to ground their financial performance in the wake of declining income, mainly due to overdependence on interest income. This study sought to determine the effect of transaction income on the financial performance of deposit-taking SACCOs in Nairobi County in Kenya.

Methodology: The study targeted all 39 DT-SACCOs in Nairobi County, Kenya; hence, a census study was conducted. Descriptive statistics, including frequencies, averages, and root mean square deviation, were produced for all the numerical data. Inferential statistics was done using the panel regression model. The results were presented using tables. A data collection matrix was used to collect data on the financial performance of the DTSACCOs, and was analyzed using STATA 18, and the outcome is presented in tables using statistics such as means, standard deviation, frequencies, and percentages.

Findings: The findings of the panel regression model indicated a positive and significant effect between transaction income and the financial performance of DT-SACCOs in Nairobi County, Kenya.

Unique Contribution to Theory, Practice and Policy: The study recommends that DTSACCOs in Nairobi County, Kenya, establish a diversified transaction-based revenue policy that allows them to sustainably monetize essential member services while ensuring affordability and transparency. The policy can be done by introducing a tiered pricing structure based on the type of service, frequency of usage, and channel used (e.g., mobile, in-person, or digital).

Keywords: *Transaction Income, Financial Performance, DT SACCOs, Kenya*

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INTRODUCTION

The fundamental objective of any financial institution is to contribute to bridging the gap by transferring funds from surplus areas to deficit areas of the economy, thus lowering the cost of conducting business and enhancing efficient markets for investment opportunities (Mumo 2021). Financial institutions allocate funds received from borrowers and investors in a way that is advantageous to both the firm and investors. By performing this role, financial institutions produce interest income, which is their main revenue stream and has a significant impact on their financial performance (Uniamikogbo, Okoye, & Chinazu, 2020). Traditionally, financial institutions have greatly relied on interest income activities, which are the net interest charged on loans and deposits, to gauge their financial performance and their long-term sustainability (Tshweneyagae, 2016).

According to Gichure (2018), financial institutions in Kenya have seen a remarkable decline in interest income due to the CBK publication that directed financial institutions to lower the interest lending rate. Private sector lending has been declining since the interest rate cap was implemented, despite the rise in credit demand (Maigua & Mouni, 2016). As a result, to keep their function as financial intermediaries, Kenyan financial institutions have been progressively investing in novel, nontraditional financial ventures (Thiongo, 2022).In addition to commercial banks, the DT SACCO sub-sector is the main source of formal financial credit services for Kenyan household economies. In Kenya, a DT SACCO functions similarly to a commercial bank in that it accepts deposits from members, provides them with withdrawable savings accounts, and makes loans to those same members.

The core business of DT-SACCOs in Nairobi County is to mobilize members' savings and offer them reasonably priced credit and other financial services. They provide a variety of financial products that are suited to the interests of their members and serve as financial mediators, transferring member money into loans and other investments. From commercial endeavors to personal growth, this approach assists members in gaining access to resources and establishing financial stability (Njane, 2024).Therefore, DT-SACCOs are contributors to the country's financial landscape by providing a significant amount of affordable credit to Kenyans, particularly those with low and middle incomes (SASRA Report, 2020; Njane, 2024). In deposit-taking Savings and Credit Co-operative Societies (DTS), financial performance refers to how well a DTSACCO can accomplish its financial and non-financial goals as well as its policies (Gweyi & Karanja, 2016).

In deposit-taking SACCOs, financial performance helps management determine whether a SACCO is running at break-even (Baraza, 2018). A growth in deposits is the result of DTSACCOs that perform well, drawing in new members (Njoki, 2018). Therefore, measuring financial performance is essential to any business's successful management (Franco-Santos, Lucianetti & Bourne, 2022). Nkuru (2024) asserts that to optimize the benefits for members, SACCO management should work to improve financial performance. Long-term increases in DTSACCO performance and profitability also guarantee investors a steady return, which attracts more investment and promotes economic expansion.

Statement of the Problem

DT SACCOs are crucial to the financial intermediation process and continue to play a pivotal role in the Kenyan financial ecosystem, considering the savings produced through them account for about 6.43% of the GDP (SASRA 2023). In the context of DTSACCOs in Nairobi County, the evaluation of financial performance hinges on the institution's capacity to address

the financial requisites of its members, taking into account their economic status. However, as measured by their ROE, despite its crucial role and growth, the financial performance of DT-SACCOs in Nairobi County has been declining. For instance, SASRA (2015) shows a decline in ROE from 2.56% in 2013 to 2.32% in 2014 and 1.89% in 2015. In 2016 and 2017, the ROE slightly rose to 2.42% and 2.69% respectively, but dropped to 2.40% in 2018 (SASRA, 2019).In 2019 and 2020, DT SACCOS in Nairobi County ROE improved to 2.60% and 2.65% respectively, only to drop to 1.59% in 2021. In 2022, ROE further rose to 2.61% and in 2023, it slumped further to 1.67% (SASRA 2021; SASRA 2023). According to SASRA (2023), the ROE of DTSACCOs deemed to have a healthy and sustained level of profitability should range around 3.8% to 4%. The bulk of these SACCOs fall short of the criterion and might not be able to endure short-term economic shocks (SASRA 2023). The number of DT SACCOs below the threshold also rose from 10 in 2022 to 15 in 2023, causing a general drop in the average ROE ratio. Among the key challenges are: mismanagement, fraud, liquidity, bad loans, stiff competition from other financial service providers, and ever-changing regulations further complicating their operations (Opondo 2022). A review of the SASRA (2023) shows that Mwalimu, Ukulima, Boresha, Shirika, Nyati Safaricom, Kencream, Ardhi, Asili, and Kimisitu DTSACCOS face some financial struggles. For instance, Harambee SACCO was on a disposal spree of its real estate portfolio to boost liquidity (Ngugi, 2021). Divergent conclusions from different scholars also reveal a lack of consensus regarding the impact of transaction income on financial performance, revealing conceptual, contextual, and methodological deficiencies.

Objective of the Study

The objective was to study the effect of transaction income on the financial performance of DT SACCOS in Nairobi County, Kenya.

Hypothesis of the Study

H_0: Transaction income does not have a significant effect on the financial performance

LITERATURE REVIEW

This section provided the basic diversification theory that underpin the financial performance of DT SACCO along with discussing the empirical evaluation of the research supporting transaction income.. The conceptual framework illustrating the relationship between the independent and dependent variables was also discussed. Additionally, the section discussed the comprehension of the research gap that existed from earlier empirical work.

Theoretical Review

Transaction income was supported by Financial Intermediation Theory developed by Goldsmith originally in 1971. According to Tirimba (2018), a financial intermediary is an organization, business, or individual that acts as a middleman between two or more parties in a financial setting, where one party is a supplier of a financial product or service and the other is a consumer or customer of that product or service. Financial intermediaries can be classified as banks, building societies, credit unions, financial advisers or brokers, insurance firms, mutual funds, and pension funds. They are usually financial entities that accept deposits or do not (Tirimba, 2018). Savers deposit money into a financial institution, which subsequently lends it to borrowers on terms that are favorable to them (Howells & Bain, 2008).

The financial intermediation theory is based on the assumption of information asymmetry as well as the agency theory. Thus, the existence of elements like high transaction costs, regulation techniques, and insufficient information explains the fundamental purpose of financial

intermediaries (Scholtens & van Wensveen, 2003). The core of financial intermediation theory is, in fact, information symmetry, which is responsible for issues like the adverse selection problem, moral hazard, and the requirement for expensive auditing and verification processes (Panigrahi, 2012). Nonetheless, a few scholars have criticized the theory of financial intermediation over the years, claiming that it fails to acknowledge the role that lenders play in risk management within the banking relationship (Allen and Santomero, 2001; Scholtens and Wensveen, 2000).

Scholtens and Wensveen's (2003) assertion that financial intermediation has shifted from its historical function to value creation—which is fueled by risk and risk management—seems to support this assertion. Interestingly, though, they found that while intermediation has enhanced and transaction costs and information asymmetry have reduced, these developments have mostly taken place in nations with highly advanced financial systems (Allen & Santomero, 1998). In Kenya, more than 50% of the population benefits from DTSACCOs through their financial intermediation role, mostly on personal development, micro and macro enterprise sectors of the economy (Mwania, 2017).

DTSACCOs incur costs associated with their role in the intermediation process. When conducting the intermediation process, DTSACCOs charge transaction fees for a range of services, such as asset securitization, securities underwriting, mutual fund and wealth management, account fees, safe deposit box fees, late fees, and costs on lending products (Okello, Munene & Mulinga, 2017). According to Odunga et al (2018), in periods of low interest rates and a bleak economic outlook, these fees can be a substantial source of income for DTSACCOs and other financial institutions. This has an effect of increasing the financial performance for DTSACCOs (Odunga et al, 2018). Thus, this theory is relevant to this study as it explains the objective of transaction fees as an income source and their relations to the financial performance of DTSACCOs in Nairobi County, Kenya.

Conceptual Framework

The conceptual framework depicts the relationship between the dependent variable and the specific variable under study. The framework has been designed based on the study's general and specific goal. Thus, it emphasizes how transaction income and financial performance are related.

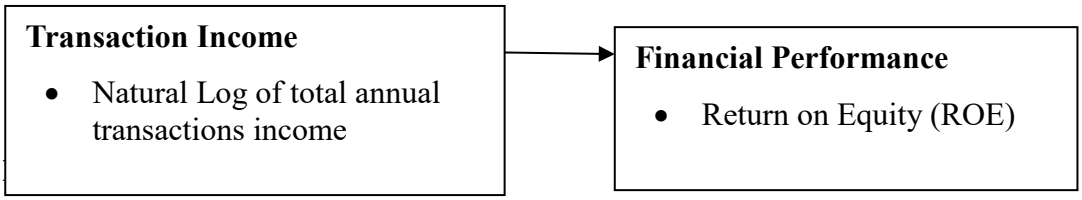

Figure 1: Conceptual Framework

Empirical Review

Abu-Khalaf and Al-Assaf (2017) investigated the impact of transaction fees on the financial performance of banks in Jordan. They used 16 banks in Jordan during the period from 2000 to 2015. Data was collected from each bank's annual reports, financial statements, and information available on the Amman Stock Exchange website. Data collected from these secondary sources were analyzed using descriptive statistics and a correlation matrix. Their findings showed that transaction fees increase income, which has a significant impact on banks'

performance by increasing the equity capital adequacy, which in turn positively affects profitability

Olarewaju, Migiro, and Sibanda (2018) did a study on the impact of transaction income on banking performance in the Sub-Saharan region. The study used the pooled, FEM, REM, and System GMM for a duration ranging from 2006 to 2015 and was across two hundred and fifty commercial banks from 30 nations in the region of Sub-Saharan Africa. As a result of the robustness of SYS-GMM, it was revealed in the outcome of this assessment that using the Herfindahl-Hirschman index, the results of the study were deemed significant at 1% level. This assessment, however, concluded that transaction income relating to banks in the region of SSA has a direct and significant effect on financial performance.

Okello and Muturi (2018) looked into the impact of income derived from transaction fees on the financial performance of commercial banks that were listed on the Nairobi Securities Exchange. The study period was for five years, between 2012 and 2017. Performance was utilized as the dependent variable in this study, and non-interest income served as the independent variable. Eleven (11) commercial banks listed on the Nairobi Securities Exchange made up the sample size for the descriptive survey study design. For data generation, the study employed the secondary data collection approach. The data was analysed using SPSS for the multiple regression analysis. The study derived from transaction fees and the financial health of Nairobi's commercial banks was positively correlated. The study was, however, conducted on commercial banks. The current study will evaluate the effects of member deposits and transaction fees income on DTSACCOs in Nairobi County, Kenya.

Research Gap

The review of the empirical literature made it clear that there were methodological, conceptual, and contextual study gaps. Contextually, the majority of research conducted on the relationship between transaction income and financial performance was conducted in other economies. For instance, Abu-Khalaf and Al-Assaf (2017) investigated the impact of transaction income on the financial performance of banks in Jordan. Further, studies done in Kenya considered other sectors, which brought out contextual gaps. For instance, Okello and Muturi (2018) looked into the impact of transaction fees income on the financial performance of commercial banks that were listed on the Nairobi Securities Exchange. Kamau's (2018) study sought to establish the effect of transaction fees income on non-funded income in commercial banks in Kenya. These studies brought out contextual gaps since they considered other sectors such as the commercial banks listed at the NSE.

Finally, the literature review revealed methodological gaps in several studies. Olarewaju, Migiro, and Sibanda (2017) examined the impact of member deposits and transaction income on banking performance in the Sub-Saharan region using the GMM model. Moloi, Nharo, and Hlobo (2021) employed hierarchical regression to establish the link between transaction income among the top 40 companies listed on the Johannesburg Stock Exchange (JSE), and lastly, Chu, Gong, Fang, LAN, and Gou (2020) looked at how transaction income affected Chinese banks' performance using Generalized Estimating Equation (GEE) models. The current study adopted a panel regression model and descriptive research design to establish the effects of transaction income and the financial performance of DTSACCOs in Nairobi County, Kenya.

The lack of consensus on empirical evidence is not surprising, as the financial performance of firms depends on the effectiveness of different components of non-interest income adopted by

individual firms. Finally, literature is still in complete darkness concerning how the financial performance of DTSACCOs in Nairobi County reacts to transaction income. This is a significant literature gap given that Kenya is an emerging market and the fact that the economies of the world are becoming more and more globally integrated (Heubischl, 2016). This study bridged this gap as there is overwhelming evidence of a knowledge gap in the literature by applying a comprehensive approach to investigate the effects of transaction income in developing economies, where the financial markets are undercapitalized, with few DTSACCOs operating.

METHODOLOGY

This study adopted a descriptive research design to analyze the effect of non-interest income on the financial performance of DTSACCOs in Nairobi County, Kenya. Descriptive design is found to be suitable for this study due to the fact that it examines and describes the way a subject of study behaves without controlling it at all (Cypress, 2018). The study's target population consisted of 39 DTSACCOs that are SASRA-registered as of December 2023. In the study, encompassed all 39 DTSACCOs in Nairobi County, a census study was appropriate and used. Data was collected for a period of 10 years (2015 – 2024). The researcher employed a secondary data collection sheet to extract and gather the required secondary data from the financial statement. Panels for data were formed by the 39 DTSACCOs that SASRA has registered and granted operating licenses to operate in Kenya. The analysis of the collected data was aided by STATA software version 18. The researcher utilized descriptive statistics, which included the frequency distribution and percentage, to examine the data. The study employed a panel regression model. A panel regression model is a combination of cross-sectional and time series data in which the data, including time series and cross-sectional data, will be pooled into a panel data set and estimated using a panel data regression (Baum, 2023

The main model for statistical analysis was:

$$\mathbf{Y_{it} = \beta_0 + \beta TI_{it} + \varepsilon_{it}} \quad \textbf{.....Equation 3. 1}$$

Where Y is the financial performance of DT SACCOs

β_0 represents the constant or coefficient of intercept

β, represent the coefficient of independent variable

$TFCI$ represents transaction income

it represents indices for individuals and time

ε_{it} represents the error term that varies non-stochastically over i and t

FINDINGS AND DISCUSSIONS

In this chapter, descriptive statistics were employed to evaluate the distribution and level of normalcy. Also presented are the findings of the regression analysis and the hypothesis test. This chapter gave background information on the topic and helped to determine preliminary results by laying a strong basis for the whole process of the defined topic. Tables were adopted to present the study's findings.

Descriptive Statistics Results

The study sought to establish the influence of transaction income on the financial performance of DTSACCOs in Nairobi County, Kenya. The results of the analysis are shown in Table 1.

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Table 1: Descriptive Statistics Results

Statistics	N	Min	Max	Mean	SD	Skewness	Kurtosis	Prob
Transaction Income	39	0.2599	0.7935	0.5335	0.8006	1.972	3.087	0.000
Financial Performance	39	0.0720	0.3400	0.3225	0.2090	2.7167	2.4045	0.000

The descriptive statistics presented in Table 1 indicated that transaction income had an average of 0.5335. This implies that 53.35% of DTSACCOs generate their non-interest income through various sources of transaction income, which may include charges, withdrawals, deposits, transfers, maintenance fees, loan application fees, and penalties for late repayments, etc. While these charges may be small, they accumulate over time and contribute significantly to the DTSACCO's overall revenue since more than half of the DTSACCOs (53.35%) generate their income from this source. The range showed the minimum values of 0.2599 and the maximum of 0.7935, indicating a diverse range in transaction income-generating activities, with a minimum of 25.99% and a maximum of 79.35% levels of transaction income-generating activities. The range is evidenced by a standard deviation of 0.8006 around the mean, indicating a high variability of transaction income for DTSACCOs, which is divergent from each other with values deviating from the mean to varying extents.

A skewness of 1.972 suggests a high degree of positive skewness, meaning that the distribution has longer tails on the right side with more extreme high values lying on the asymmetric right tail of the distribution. According to Hitti (2022) and Brown (1997), a skewness value between -1 and +1 is generally considered acceptable, while values outside of this range (specifically, beyond -2 and +2) suggest substantial non-normality. The Kurtosis coefficient of 3.087 indicates a slightly leptokurtic distribution, meaning it has a higher peak and heavier tails than a normal distribution. The kurtosis value of 3.087 is close to the kurtosis of a normal distribution (which is 3), therefore considered to be normal and acceptable since it lies between -4 and +4, which is the acceptable normal univariate distribution (Kim 2013; Orcan 2020; Ryu 2011).

Lastly, the study aimed to evaluate the financial performance of DTSACCOs in Nairobi County, Kenya, in line with the dependent variable. Table 4.1 reveals that the average ROE measuring the financial performance was 0.3225, signifying that 32.25% of DTSACCOs in Nairobi County, Kenya, effectively employed their transaction income in generating a significant return for each shilling invested by their shareholders. ROE ranged from a minimum of 0.0720 to a maximum of 0.3400. The minimum value of 0.0720 indicates that 7.2% of DT-SACCOs were generating a modest but positive return on their members' equity, suggesting a basic level of financial performance and efficient use of capital during the period under review. A maximum ROE of 34% suggests that some DT-SACCOs are exceptionally effective at generating profits from member equity, indicating a stronger financial performance than others during the study period.

However, a standard deviation of 0.2090 (20.90%) for DT SACCOs' ROE compared to the mean of 0.3225 (32.25%) indicates that the ROE fluctuates significantly around the average, suggesting a higher level of risk and volatility in the financial performance of DTSACCOs in Nairobi County, Kenya. The results indicated a skewness coefficient of 2.7167, signifying a highly skewed distribution to the right (positive skew), meaning the data has a longer tail extending towards larger values. A kurtosis coefficient of 2.4045 suggests a distribution that is more peaked (leptokurtic) than a normal distribution, but not excessively so, as it's closer to the normal distribution's kurtosis of 3 (mesokurtic) than it is to a very peaked

distribution. However, the skewness and kurtosis values were within the required threshold of a normal distribution as indicated by Kim (2013), Orcan (2020), and Ryu (2011).

Inferential Results

To establish the relationship between transaction income and the financial performance of DT SACCOs in Nairobi County, Kenya, and draw broad conclusions about the SACCOs, inferential statistics were employed. To investigate the causal relationship between the independent and dependent variable, panel data analysis was used. The test of significance method was used in the study to evaluate the hypotheses, and it involved determining the significance of the regression coefficients. A probability value was utilized to calculate the significance level.

Correlation Analysis

The study carried out a correlation analysis to establish their relationship with the financial performance of DTSACCOs in Nairobi County, Kenya. A linear relationship was determined using the correlation coefficient (r). Table 2 presents the correlation matrix

Table 2: Correlations Coefficient

		ROE	Transaction Income
ROE	Pearson Correlation	1.0000	
	Sig.(2- tailed)		
	N	39	
Transaction Income	Pearson Correlation	0.707*	1.0000
	Sig.(2- tailed)	0.0000	
	N	39	39

* Correlation is significant at the 0.05 level (2-tailed).

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

Table 4.2 establishes the correlation results of transaction income and financial performance of DTSACCOs in Nairobi County, Kenya, r=0.707, and P value = 0.000. This suggests that transaction income has a strong positive correlation with the financial performance of DTSACCOs in Nairobi County, suggesting that transaction fees, membership fees, and other service charges contribute significantly to their overall income and are hence an important factor in improving the financial performance of these SACCOs.

Regression Analysis

The study sought to know the relationship between transaction income and the financial performance of DTSACCOs in Nairobi County, Kenya. Panel regression analysis was done to obtain the R coefficient and R-squared that determined the relationship.Table 3 explains the model summary.

Table 3: Model Summary

Model 1	Multiple R	R Squared	Adjusted R Square	S.E. Regression	Obs
Financial Performance	0.756[a]	0.5713	0.4972	2.481349	390

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The findings of the model summary reveal the results of Multiple R to be 0.756. The multiple R is an indicator of the correlation coefficient between the observed and predicted values/. The results thus imply that there is a strong relationship between transaction income and the financial performance of DTSACCOs in Nairobi County, Kenya.

The coefficient of determination, R^2, is a metric that provides details of the goodness of fit of the model. In the context of regression analysis, R^2 is a statistical indicator of how well the regression line matches the real data. From the findings, the R^2 value of 0.5713, which is 57.13% means that the variations in the percentage of transaction income, accounted for 57.13% of the variances in ROE; hence could forecast or explain the financial performance of DTSACCOs in Nairobi County, Kenya. Other factors not included in this study model will thus explain the remaining 42.87% of the variation in the financial performance of DTSACCOs in Nairobi County, Kenya.

Analysis of Variance (ANOVA)

To evaluate the significance of the model, the study conducted an Analysis of Variance (ANOVA). The results are presented in Table 4.

Table 4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.015	1	14.754	4.672	0.000 [b]
	Residual	110.546	37	3.158		
	Total	**169.561**	**38**			

The results of the ANOVA model had an F value of 4.672 and a P value of 0.000<0.05. This is an indication that the overall regression was suitably applied. Additionally, the study showed that transaction income significantly impacted the financial performance of DTSACCOs in Nairobi County, Kenya. These findings agreed with Kiende and Matanda (2020), who revealed that transaction income and the financial performance of commercial banks in Kenya were directly and significantly related. Therefore, we reject the null hypothesis that the model is insignificant and conclude that transaction income, have a significant effect on the financial performance of DTSACCOs in Nairobi County, Kenya. The study can conclude that the data utilized in the study were sufficient and reliable for concluding the variable being examined.

Regression Coefficient Results

The study carried out a panel regression analysis among the dependent and independent variable to establish the effect of transaction income and the financial performance of DTSACCOs in Nairobi County, Kenya. The coefficient results are shown in Table 5.

Table 5: Regression Coefficients

Financial Performance	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	
Transaction Income	0.685	0.061	11.230	0.000	0.3451	0.4430
_cons	1.073	0.179	5.994	0.037	0.0039	0.0300
sigma_u	0.00199					
sigma_e	0.00367					
Rho	0.22724	(fraction of variance due to u_i)				

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The following model was derived:

$$Y_{it} = 1.073 + 0.685 TI_{it}$$

Where:

Y_{it} represents financial performance

TI_{it} represents transaction income

Discussions

The objective of the study was to establish the effect of transaction income and the financial performance of DTSACCOs in Nairobi County, Kenya. The null hypothesis (H_0) indicated that transaction income has no significant effect on the financial performance of DTSACCOs in Nairobi County, Kenya. The results show the coefficient results of transaction income to be 0.685 with a P value of 0.000 (P>0.005). The results imply that holding other factors constant and transaction income is controlled, a unit increase of transaction income will lead to an increase in the financial performance of DTSACCOs in Nairobi County, Kenya by 0.685 units. This will have a significant impact on the financial performance of these firms, given the p-values of 0.000 (P>0.005). The study thus rejected the null hypothesis and concluded that transaction income has a significant effect on the financial performance of DTSACCOs in Nairobi County, Kenya.

The findings resonates with those of Abu-Khalaf, and Al-Assaf (2017 in Jordan, Olarewaju, Migiro, and Sibanda (2018) in Nigeria, Kamau (2018) and Okello and Muturi (2018) in Kenya who all agree that transaction income is essential to the DTSACCO's profitability because it offers a source of income other than interest from loans, which has a big impact on sustainability, profitability, and the company's ability to provide competitive financial services. However, contrary to the findings is a study done by Sun, Wu, Zhu, and Stephenson (2017) in China, Tshweneyagae, (2016) in Botswana and Gichure (2015)in Kenya, who argue that transaction based income inversely impacts financial performance particularly when it comes to stability of finances and possible dangers of depending too much on varying transaction volumes. Hang (2025) and Phan (2022), on the other hand, found no significant relationship between transaction income and financial performance

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter summarizes the results from Chapter Four and offers the study's conclusions and recommendations based on its objective.

Summary

The specific objective was to examine the effect of transaction income and the financial performance of DTSACCOs in Nairobi County, Kenya. The correlation results yielded a strong positive correlation between transaction income and financial performance. Statistical tests on the null hypothesis revealed that there was a significant relationship between transaction income and ROE. This implies that as DTSACCOs in Nairobi County in Kenya increase their transaction-based revenues, it in turn increases the financial performance of these SACCOs. We therefore rejected the null hypothesis and concluded that transaction income has a statistically significant effect on the financial performance of DTSACCOs in Nairobi County, Kenya

Conclusion

The study concludes that transaction income from transaction-based activities such as transaction fees, membership fees, and other service charges contributes significantly to the overall income and is hence an important factor in improving the financial performance of these SACCOs. The study underscores the importance of transaction income as essential to DTSACCO's financial performance because it offers a source of income other than interest from loans, which has a big impact on sustainability, profitability, and the company's ability to provide competitive financial services. The study concludes that DTSACCOs in Nairobi County, Kenya, should strategically increase their transaction-based activities to potentially boost revenue.

Recommendations of the Study

Transaction income is an important revenue stream for DTSACCOs derived from individual transactions, which may include individual account maintenance, withdrawals and deposits, membership fees, transfers, and other service charges. The findings conclude that these fees play a significant role in boosting the financial standing of DTSACCOs in Nairobi County, Kenya.

The study recommends that DTSACCOs in Nairobi County, Kenya, introduce an automated micro-transaction fee. This can be accomplished by implementing tiered micro-fees on non-core services, which entails assessing small, structured fees according to the number or frequency of member transactions, such as SMS alerts, mini-statements via USSD or mobile apps, and mobile money transfers (such as M-PESA withdrawals or deposits). Instead of applying uniform charges, only high-usage members contribute more, and this balances member satisfaction with financial sustainability. For instance, this can be done by scaling and customizing transactions, e.g., setting dynamic limits like the first 5 mobile transactions per month, free, next 10 KSh 5 each, beyond 15, KSh 10 each. The same strategy should also apply to balance checks or alerts. By doing this, these SACCOs will not only improve their digitization but also their financial performance by creating a new, predictable income stream from digital activity, thereby reducing dependency on traditional interest income alone.

Another recommendation for DTSACCOs is targeted bulk payment solutions. This approach refers to services where DTSACCOs handle several financial transactions in bulk for organizations or companies, like school fees, dividends, supplier payments, loan disbursements, and payment of salaries. E.g., an employer, cooperative, or institution sends a bulk payment instruction (e.g., payroll or dividends) to the SACCO, the SACCO uses its system to disburse payments to multiple member accounts or mobile wallets. A transaction or service fee is charged by the SACCO for each recipient or each processed bulk file. The strategy will benefit the DTSACOs by not only earning them institutional clients by making them a payment partner for schools, NGOs, SMEs, farmer cooperatives, etc., but it will also help the DTSACCOs to generate transaction-based income by earning them fees per transaction, creating a reliable, non-interest income stream.

Recommendations for Policy

DTSACCOs should establish a diversified transaction-based revenue policy that allows them to sustainably monetize essential member services while ensuring affordability and transparency. The policy can be done by introducing a tiered pricing structure based on the type of service, frequency of usage, and channel used (e.g., mobile, in-person, or digital). When

well-designed, it improves the SACCO's financial health, service efficiency**,** and compliance with regulatory expectations. DTSACCO can also introduce an institutional and bulk payment services policy. This policy empowers DTSACCOs to move beyond individual accounts and tap into high-volume, low-risk income opportunities. Under this policy, SACCOs facilitate high-volume financial transactions on behalf of institutions, earning transaction fees, float income**,** and boosting member engagement. By offering structured, reliable payment services to schools, governments, NGOs, and cooperatives, SACCOs can boost revenue, expand their client base**,** and enhance long-term sustainability.

Suggested Areas for Further Research

The purpose of the study was to assess the effects of trnsaction income and how it affected the financial performance of DTSACCOs in Nairobi County, Kenya. Future studies should focus on other non-interest income sources that may include FOREX income, dividend income, leasing, and credit card charges, among other specific variables, to ascertain the real effect and the financial performance of DTSACCOs in Nairobi County, Kenya.

Second, in order to determine the true effect of trnsaction income on financial performance, more research should take into account financial institutions from a regional or global perspective. Also, the current study only looked at Kenya's DTSACCOS in Nairobi County; other studies can be conducted on commercial banks, insurance sectors, or microfinance establishments since they are also financial institutions. The study limited itself to annual data spanning ten years; further studies can focus on more than ten years with monthly data to establish whether the finding will be consistent.

Finally, the study's findings highlight the importance of trnsaction income, showing that it makes up approximately 57.13% of the variance in ROE; hence. Other factors not included in this study model will thus explain the remaining 42.87%. Future research should examine more facets of non-interest income and financial performance in order to obtain a more comprehensive viewpoint. And establish the remaining factors accounting for 42.87%. A more thorough and nuanced understanding of the factors influencing the financial performance of DTSACCOS in this particular area will result from a more extensive investigation, which will help these financial institutions make better decisions.

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