

Effect of Electronic Banking on Financial Performance of Deposit Taking Micro Finance Institutions in Kisii Town

Thomas Odiwuor Okombo

(Department Of Business Administration, Jomo Kenyatta University of Agriculture and Technology, Kenya)

Abstract : *The micro finance institutions sector has extremely high competition indicated by the shifting market share and profitability. The competition is among the MFIs sector, from the mainstream commercial banks and the telecommunication money transfer platforms such as Mpesa. The banking sector in general inclusive of the MFI sector have embraced electronic banking as means of introducing convenience to the customers and increase their competitiveness. This study examined the effect of electronic banking on financial performance of deposit taking MFIs in Kisii town. The specific objective of the study was to examine the impact of low transactional costs (through electronic banking) on the financial performance of deposit taking MFIs. The study utilized the descriptive research design and the questionnaire as means of data collection. The census sampling method was used for sampling. The data was analyzed through the use of SPSS in which both the descriptive and inferential statistics were extracted. There were several ways in which the low transactional costs affected the financial performance. The results indicated that access of bank account at customer's convenience (4.3088), access of bank account over non-working hours (3.7500), interlinking various products with electronic banking (4.0588), access in absence of physical branch (4.2794), and reduction of stationery costs (3.7206). There was significant statistical (positive) relationship between the low transaction costs and financial performance. This implied that decrease on the transactional costs leads to improved financial performance among the Microfinance Institutions.*

Keywords: *Electronic Banking, Low Transaction Cost*

I. Introduction

Before the introduction of the electronic banking, the banking transactions were done manually which slowed down the settlement of transactions (Kahinga, 2014). This involved the posting of one transaction from one ledger to another by human beings. The evolvement of the technology has enabled financial institutions offer electronic banking (Karuru, 2013). This is by the use of new technologies such as personal computer (PC) banking, mobile banking, automated teller machines (ATM), electronic funds transfer, account-to-account transfer, paying bills online, online statements, credit cards among others (Mwaura, 2013).

The use of technology has several advantages ranging from regulation, operational costs, accessibility of services will accrue to the institution and customers that adopt the technology that will in turn influence the firm's financial performance (Nzau, 2013). The electronic banking have enabled the Microfinance Institutions (MFIs) to automate the repetitive tasks resulting into greater efficiency and effectiveness, better time usage and enhanced controls (Nytathira, 2012). This has helped the institutions to control their overheads and operating costs hence may become more profitable in the future (Sabana, 2014). The electronic banking reduces an institution's paperwork and has proper documentation for their records as a whole (Ngumi, 2014). Banks have continued to leverage on robust ICT platforms rather than recruiting corresponding number of employees to serve the increasing number of customers hence reducing the payroll cost (Nzau, 2013).

The use of the electronic banking in MFIs is of profound importance impact due to the customer demographics that the MIFIs serve. In this context, Atavachi (2013) notes that E-banking has the potential to revolutionize access to financial services and there is a growing consensus that e-banking offers a unique opportunity to address mainstream bank's two major barriers to serving the low income market. These barriers include the need for a branch infrastructure and managing high volumes of low value transactions. The services offered through the electronic banking include opening accounts, transferring funds to different accounts, online viewing of the accounts, online inquiries and requests, and online salaries payments (Kahinga, 2014). Others include clearing cheques status query, online loan application, online deposit of funds as well as loan repayment and instant alerts of account or transactions status (Ketere, 2014).

There is intense competition in the MFIs sector as evidenced through the shifting performance indicators such as market share and profitability. According to the Central Bank of Kenya (2012), Kenya Women Finance Trust (KWFT) DTM had 67.21% market share, while Faulu Kenya DTM (21.17%), SMEP

DTM (7.87%), Rafiki DTM (2.09%), Remu DTM (1.12%) and Uwezo DTM (0.54%) in 2011 financial year. While KWFT DTM still maintained the largest market share in 2012 financial year, the same had reduced by 5.51% to 61.7% while that of Faulu Kenya DTM had increased marginally by 2.23% (Central Bank of Kenya, 2012). This attested to the competitive nature of the DTMs. In the 2013 financial year, the market share for KWFT DTM had further dropped by 8.51% margin to 53.19%. During the same period, the market share for Faulu Kenya had increased from 23.4% to 26.64% market share (Central Bank of Kenya, 2013). These statistics indicate a high level of competition within the DTM environment. However, the DTMs are further exposed to competition from mainstream commercial banks and competition products from the telecommunication industry such as the Mpesa product. This study wishes to examine the impact of the adoption of the electronic banking on the financial performance of the depositing taking microfinance institutions. The studies done in the microfinance sector often focuses on the role of the MFIs on poverty eradication amongst different demographics. This study thus attempts to examine the factors improving on the financial performance of diverse microfinance in Kisii town that is under studied phenomenon. This study seeks to fill this knowledge gap.

II. Literature Review

The adoption of the electronic banking such as the internet banking, mobile banking and the use of ATM has a direct impact of the financial performance of the DTMs (Gitau, 2011). The low costs of these platforms have the effect of increasing the number of customers who have subscribed to the channels and who have overall subscribed to the DTMs as customers (Mwangi, 2014). This has the effect of the DTMs having a huge customer base hence driving their income through the monthly account maintenance fees and an increase in customer deposits hence lower costs in attraction of capital for lending purposes (Ngugi, 2012). The low costs of the electronic banking ensures that Kenyans accessing informal financial services such Accumulating Savings and Credit Associations (ASCAs), Rotating Savings and Credit Associations (ROSCAs) and shylocks are diverted to the formal financial services (Tomno, 2014). The low transactional costs mean that DTMs, which operates on the high volumes low margins models, have the ability to increase their profitability by the proportionate increase in the customer numbers (Abondo, 2013). Customers who have subscribed to the electronic banking are able to execute additional value adding services such as Mpesa transactions and buying of airtime (Tomno, 2014). Through these services, the DTMs earn volume and transactional commissions from third party services provider such as Safaricom (Kanogo, 2013). The accessibility of the customer's funds through electronic banking may fuel increased transactions hence revenue as the customers have easy access to their financial services provider whenever they are e.g. in leisure spots (Kinuthia, 2014).

III. Objective Of The Study

To examine the effect of the low transaction costs (through electronic banking) on the financial performance of Deposit taking microfinance Institutions

IV. Research Question

What is the effect of the low transaction costs (through electronic banking) on the financial performance of deposit taking microfinance institutions?

V. Methodology

This study adopted a descriptive design. Descriptive research design is a process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects in the study (Ngumi, 2014). Kothari (2009) asserted that descriptive research attempts to answer the "what" kind of questions in addition to describing the various opinions of the respondents in respect of the theme(s) being studied. The target population of this study was the DTMs in Kisii town and specifically the employees in these DTMs. According to Kitavi (2014), a sample is a small group obtained from the accessible population. On the other hand, sampling is the means of selecting a given number of subjects from a defined population as representative of that population (Ibrahim, 2012). The simple random sampling was used to select eighty respondents in the DTMs in Kisii County. Eighty questionnaires were distributed to the respondents. However, only seventy five questionnaires were returned due to various issues including non-filled questionnaires by some respondents, misplaced questionnaires and respondents who were away from the work stations for prolonged periods. This constituted 93.75% return rate. Out of the seventy five questionnaires that were returned, a further seven questionnaires were not analyzed as they had identifiers, incompletely filled questionnaires and some respondents didn't fill the questionnaire as per the set instructions. These questionnaires had the ability to compromise the integrity of the results hence were eliminated in the final analysis. Therefore, the final number of questionnaires that were analyzed was sixty eight questionnaires which represented 85.0% response rate.

VI. Findings And Discussions

The transactional costs impact on the financial performance of the deposit taking microfinance was examined using five different metrics that is increased customer deposits, and increased transactional fees. Others are higher volumes of transactions through electronic banking, payment of credit facilities frequently, and increased product uptake. A likert scale of Strongly Disagree (SD), Disagree (D), Uncertain (U), Agree (A) and Strongly Disagree (SA) was used. The results were as follows; in the context of increased customer deposits the results were 8.8% (SD), 22.1% (D), 7.4% (U), 23.5% (A) and 38.2% (SA). The results for the increased transactional fees were 0.0% (SD), 16.2% (D), 14.7% (U), 45.6% (A) and 23.5% (SA). The results for higher volumes of transactions through electronic banking were 0.0% (SD), 0.0% (D), 23.5% (U), 38.2% (A) and 38.2% (SA).

Table 1; Frequency Distribution of Transactional Costs

	SD	D	U	A	SA	TOTAL
The low transactions costs of electronic banking has led to increased customer deposits	8.8%	22.1%	7.4%	23.5%	38.2%	100%
The low transactional costs of electronic banking has increased the frequency of customer transactions hence increase in transactional fees	0.0%	16.2%	14.7%	45.6%	23.5%	100%
The low transactional costs of electronic banking has led to higher volumes of transactions through electronic banking	0.0%	0.0%	23.5%	38.2%	38.2%	100%
The low transactional costs of electronic banking has led to payment of credit facilities promptly	14.7%	32.4%	22.1%	30.9%	0.0%	100%
The low transactional costs of electronic banking has contributed more product uptake such Mpesa transactions that DTM earns a commission	0.0%	7.4%	30.9%	23.5%	38.2%	100%

In the context of the payment of credit facilities frequently the results were 14.7% (SD), 32.4% (D), 22.1% (U), 30.9% (A) and 0.0% (SA). The results for increased product uptake were 0.0% (SD), 7.4% (D), 30.9% (U), 23.5% (D) and 38.2% (SD). To gain greater insights into the transactional costs impact on the financial performance of the deposit taking microfinance, the means and the standard deviations were generated.

These metrics of the financial performance were measured through the use of the likert scale with the descriptors Strongly Disagree (SD), Disagree (D), Uncertain (U), Agree (A) and Strongly Disagree (SA) was used. These descriptors were represented as 1, 2, 3, 4 and 5 respectively in the SPSS input spread sheet. The means for the various metrics were; increased customer deposits (mean of 3.6029), increased transactional fees (mean of 3.7647), higher volumes of transactions through electronic banking (mean of 4.1471), payment of credit facilities promptly (mean of 2.6912), and increased product uptake (mean of 3.9265). The prompt payment of the credit facilities metric with a mean of 2.6912 means that the majority of the respondents tended to disagree with the metric. On the other hand, the metrics increased customer deposits, increased transactional fees, increased product uptake with means of 3.6029, 3.7647 and 3.9265 respectively indicated that the respondents tended to be uncertain on the measured metric. Finally, in the context of the higher volumes of transactions through electronic banking metric with a mean of 4.1471 meant that a majority of the respondents tended agree with the metric.

Table 2; Descriptive Statistics for Transactional Costs

	N	Mean	Std. Deviation
The low transactions costs of electronic banking has led to increased customer deposits	68	3.6029	1.41569
The low transactional costs of electronic banking has increased the frequency of customer transactions hence increase in transactional fees	68	3.7647	.99428
The low transactional costs of electronic banking has led to higher volumes of transactions through electronic banking	68	4.1471	.77776
The low transactional costs of electronic banking has led to payment of credit facilities promptly	68	2.6912	1.06865
The low transactional costs of electronic banking has contributed more product uptake such Mpesa transactions that DTM earns a commission	68	3.9265	.99725
Valid N (listwise)	68		

The inferential statistics were analyzed using the Principal Component Factor Analysis with a view of identifying the inherent latent factors in the transactional costs impact on financial performance. The factors with eigenvalues of greater than 1 were extracted in this case there were two factors eigenvalues of 2.706 and 1.075. These two factors that is factor 1 and 2 accounted for 54.119% and 21.49% variance in the financial performance. This indicates that the five metrics that compose the transactional costs can be divided into two factors that is factor 1 and 2.

Table 3; Total Variance of Transactional Costs Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.706	54.119	54.119	2.706	54.119	54.119
2	1.075	21.490	75.610	1.075	21.490	75.610
3	.599	11.982	87.592			
4	.521	10.417	98.009			
5	.100	1.991	100.000			

Extraction Method: Principal Component Analysis.

The table 4 shows the two factors and the ways in which the components were loading to them in order of significance. There were two factors that contributed to the use Transactional Costs Impact on Financial Performance that is factor 1 and factor 2 accounting to 54.119% and 21.49% variance in financial performance respectively. Four components were loading into factor 1 that is the low transactions costs of electronic banking has led to increased customer deposits (factor loading 0.612), low transactional costs of electronic banking has increased the frequency of customer transactions hence increase in transactional fees (factor loading 0.876).

Others were low transactional costs of electronic banking has led to higher volumes of transactions through electronic banking (factor loading 0.872) and the low transactional costs of electronic banking has led to payment of credit facilities promptly (factor loading 0.658). The factor 2 had only one component that is the low transactional costs of electronic banking has contributed more product uptake such Mpesa transactions that DTM earns a commission with a factor loading of 0.642. The factor loading indicates the relative strengths of the five different constructs that collectively make transactional costs impact on financial performance. In the order of importance/strengths, the metrics were low transactional costs of electronic banking has increased the frequency of customer transactions hence increase in transactional fees (factor loading 0.876), and low transactional costs of electronic banking has led to higher volumes of transactions through electronic banking (factor loading 0.872). Others were the low transactional costs of electronic banking has led to payment of credit facilities promptly (factor loading 0.658), and low transactional costs of electronic banking has contributed more product uptake such Mpesa transactions that DTM earns a commission with a factor loading of 0.642. The least significant factor was the low transactions costs of electronic banking have led to increased customer deposits (factor loading 0.612).

Table 4; Component Matrix of Transactional Costs

	Component	
	1	2
The low transactions costs of electronic banking has led to increased customer deposits	.612	.609
The low transactional costs of electronic banking has increased the frequency of customer transactions hence increase in transactional fees	.876	.086
The low transactional costs of electronic banking has led to higher volumes of transactions through electronic banking	.872	-.361
The low transactional costs of electronic banking has led to payment of credit facilities promptly	.658	.392
The low transactional costs of electronic banking has contributed more product uptake such Mpesa transactions that DTM earns a commission	.609	.642

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Finally, in conclusion the following research hypothesis was tested;

H₀: There is no significant statistical relationship between low transaction costs through electronic banking and the financial performance of Deposit taking microfinance Institutions

H_A: There is significant statistical relationship between low transaction costs through electronic banking and the financial performance of Deposit taking microfinance Institutions

Table 5; Hypothesis Testing

		Financial Performance
Low Transactional Costs	Pearson Correlation	.744**
	Sig. (2-tailed)	.000
	N	68

** . Correlation Is Significant at the 0.05 Level (2-Tailed)

VII. Conclusion

There was significant statistical (positive) relationship between the low transaction costs and financial performance. This implied that decrease on the transactional costs leads to improved financial performance among the Microfinance Institutions.

References

- [1]. Abondo, C. (2013). The Effect of Size on the Financial Performance of Deposit Taking Microfinance Institutions and Commercial Banks in Kenya. *Interdisciplinary Journal of Contemporary Research in Business*, 1(1), 25–32.
- [2]. Atavachi, B. (2013). Effect of Electronic Banking on Financial Performance of Deposit Taking Micro Finance Institutions in Kenya. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, 3(3), 17–20.
- [3]. Central Bank of Kenya, . (2012). Central Bank of Kenya Bank supervision annual report 2011. Retrieved from <https://www.centralbank.go.ke/images/docs/CBKAnnualReports/2011annualreport.pdf>
- [4]. Central Bank of Kenya, . (2013). Central Bank of Kenya Bank supervision annual report 2012. Retrieved from <https://www.centralbank.go.ke/images/docs/CBKAnnualReports/2012annualreport.pdf>
- [5]. Gitau, R. (2011). The Relationship Between Financial Innovation and Financial Performance of Commercial Banks in Kenya. *Journal of Accounting and Finance*, 1(2), 25–31.
- [6]. Ibrahim, I. (2012). Factors Underpinning Usage Behaviour of an Electronic Filing System: The Case of Malaysian Personal Taxpayers. *International Journal of Asian Social Science*, 4(3), 1–21.
- [7]. Kahinga, D. (2014). Effect of Financial Innovation on Profitability of Deposit Taking Microfinance Institutions In Kenya. *Journal of Management Research*, 22(2), 17–24.
- [8]. Kanogo, J. (2013). Effects of Electronic Banking in International Business Environment and Performance by Diamond Trust Bank Limited in Kenya. *Journal of Sustainable Development in Africa*, 1(2), 29–34.
- [9]. Karuru, F. (2013). E Banking as a Competitive Banking Strategy Among Lower Level Banks in Kenya. *International Journal of Business Performance Management*, 2(1), 27–29.
- [10]. Ketere, S. (2014). The Effect of Financial Innovation on the Financial Performance of Micro Finance Institutions in Kenya. *International Journal of Science and Research*, 1(1), 13–17.
- [11]. Kinuthia, N. (2014). Determinants of Lending Interest Rates in Deposit Taking Microfinance Institutions in Kenya. *Journal of Business and Management*, 2(3), 27–33.
- [12]. Kitavi, M. (2014). Influence of Headteachers' Leadership Styles on Pupils' Performance at Kenya Certificate of Primary Education in Matinyani Sub County, Kitui County Kenya. *Journal of Modern Accounting and Auditing*, 1(1), 17–22.
- [13]. Mwangi, K. D. (2014). The Effect of Electronic Banking on the Financial Performance of Commercial Banks. *Interdisciplinary Journal of Contemporary Research in Business*, 1(2), 15–19.
- [14]. Mwaura, J. (2013). The Effect of Financial Planning on the Financial Performance of Automobile Firms in Kenya. *Journal of International Development*, 1(2), 34–39.
- [15]. Ngugi, D. (2012). The Effects of Board Diversity on the Financial Performance of Commercial Banks in Kenya. *International Journal of Business and Social Research*, 1(2), 25–29.
- [16]. Ngumi, S. (2014). The Effect of Lending Interest Rates on Fianancial Performance of Deposit Taking Micro Finance Institutions In Kenya. *Journal of Management and Business Studies*, 2(3), 36–39.
- [17]. Nyathira, N. C. (2012). Financial Innovation and Its Effect on Financial Performance of Commercial Banks in Kenya. *International Journal of Business Performance Management*, 1(2), 29–34.
- [18]. Nzau, F. (2013). Application of Electronic Banking as a Competitive Strategy by Commercial Banks in Kenya. *Journal of Modern Accounting and Auditing*, 1(2), 36–42.
- [19]. Sabana, B. (2014). Entrepreneur Financial Literacy, Financial Access, Transaction Costs and Performance of Micro Enterprises in Nairobi City County, Kenya. *International Journal of Research in Management, Economics and Commerce*, 1(2), 25–30.
- [20]. Tomno, J. (2014). Relationship Between Competitive Strategies and Performance of Microfinance Institutions in Kenya. *International Journal of Financial Research*, 1(2), 32–35.