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Influence of Alternative Banking Channels on Financial Performance of Listed Tier 1 Commercial Banks in Kenya

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Abstract: **This study sought to determine the influence of alternative banking channels on financial performance of listed tier 1 commercial banks in Kenya. The study adopted a causal research design to test the cause and effect relationship between the variables. The target population for this study was at two levels. The first target population was at institutional level where the study targets 6 listed tier 1 commercial banks in Kenya in operation as at 31 December 2016. Primary data was collected by administering open and close-ended questionnaire to the respondent.The study findings established that there was a weak correlation between agency banking, online banking, mobile banking and automatic teller machines and financial performance of listed tier 1 commercial banks in Kenya. In addition, the study established that agency banking and online banking have a positive and significant relationship with financial performance while mobile banking has a negative but insignificant relationship with financial performance. Additionally, the study findings show that ATMs have a positive and insignificant relationship with financial performance of listed tier 1 commercial banks in Kenya. The study recommends that listed tier 1 commercial banks should continuously invest in alternative channels as it would afford them a better cost control measure compared to traditional investments in brick and mortal of physical branches. This helps to minimize the cost per unit of service and hence improved financial performance for the banks. Listed tier 1 commercial banks should come up with several other ways of utilizing and returns from mobile banking and internet banking.**

Keywords: **alternative banking channels, ATMs, 1 commercial banks.**

1. BACKGROUND OF THE STUDY

The enactment of The Banking Act (amendment) 2015 introduced price controls in the Kenya's banking industry. This saw the lowering of loan interests to 14 per cent, 4% per cent above the Central Bank Rate (CBR) while interest paying deposits are at 70 per cent of the regulators rates. With Net interest income contributing to 72 per cent of overall revenues of the listed commercial banks, reduction in profitability is expected and hence lowered return on equity (Cytonn Investments, 2016). To moderate against lowered profitability, banks are responding through alternative banking Channels such as mobile, internet and agency banking. What remains unclear is how these new methods of delivering financial services affect the financial performance of Tier 1 commercial banks.

Traditionally, commercial banks have used branches, ATM and call centers to interact with their customers, though newer direct channels such as social media, mobile, and Internet have emerged recently (Awinja, 2015). Branches have always played an important role and remain a key banking channel. With customer needs and preferences frequently changing, coupled with ever present innovations on technology has increased the popularity and usage of other direct channels in the past ten years (Cytonn Investments, 2016). The current economic scenario gives banks an opportunity to identify channels that are most important to their customers, and provide a positive experience across them. Banks are shifting their customers from high-cost to lower-cost channels, thus reducing their total cost-to-serve. This will help banks leverage their distribution networks by offering the right products to the right customer segment through a desired channel, resulting in overall cost savings and an enhanced financial performance (Mabwai, 2016).

Banks globally are investing in enterprise mobile financial service solutions to deliver more mobile-based banking services and reduce the overall cost of operations. As the adoption rate of online banking continues to increase globally, banks are expected to increase their online marketing presence by leveraging technologies and social networks, which have evolved as an integral part of the banking channel mix (Saluja & Wadhe, 2015). Though branches remain an important channel for customers, transaction volumes across branch networks are estimated to have grown only marginally through 2016-17, and are expected to remain flat in the future. In contrast, the online transaction volumes within the online channel are estimated to have grown at the highest rate through 2016-17, and are expected to continue growing at a healthy pace going forward (Central Bank of Kenya, 2016). According to the Central Bank of Kenya (CBK), as at 31st March 2016, there were 17 commercial banks that had contracted 40,224 agents which had facilitated over 170.5 million cumulative transactions valued at Ksh. 930.2 billion as compared to 16 commercial banks that had 34,381 agents that had facilitated 149.4 million transactions valued at Ksh. 817.7 billion as at 31st March 2015. The number of banking transactions undertaken through bank agents increased from 10.3 million in quarter one of 2015 to 55.8 million transactions in quarter one of 2016. Similarly, the value of banking transactions undertaken through agents increased from Ksh. 65.0 billion to Ksh. 176.7 billion over the same period. This was mainly due to increased confidence and acceptability of the agency banking model by banks and the public as an economical, convenient delivery channel (Central Bank of Kenya, 2016).

Listed Tier 1 Commercial Banks in Kenya:

Central bank of Kenya regulates all the Tier one commercial banks as well as other financial institutions and commercial banks in Kenya as provided so by the laws of Kenya under the bank act. Tier One commercial banks are dominant titans in the country’s banking system and they are closely monitored by regulators to guarantee that they are in consistence with the laws and directions. Kenyan banking sector comprising of forty-three banks registered total net assets of Ksh. 2.7 trillion as at 31st December 2013(CBK 2013). Commercial banks in Kenya are classified into different tiers based on a weighted composite index of their assets, profitability, capital and reserves as well as other economic aspects. Out of the forty-three (43) registered Commercial banks in Kenya, only six (6) listed Tier One commercial banks in Kenya. The Tier One commercial banks in Kenya control over 50% of the market share, (CBK, 2013).

Statement of the Problem:

The enactment of The Banking Act (amendment) 2015 introduced price controls in the Kenya’s banking industry. This saw the lowering of loan interests to 14 per cent, 4% per cent above the Central Bank Rate (CBR) while interest paying deposits are at 70 per cent of the regulators rates. With Net interest income contributing to 72 per cent of overall revenues of the listed commercial banks, reduction in profitability is expected and hence lowered return on equity (Cytonn Investments, 2016). To mitigate against lowered profitability, banks are responding through alternative banking Channels such as mobile, internet and agency banking. What remains unclear is how these new methods of delivering financial services affect the financial performance of tier 1 commercial banks.

The researcher however did not consider the effect the service delivery channels would have on financial performance of commercial banks. Kamau (2014) did a study on the effects of financial innovations on the financial performance of commercial banks in Kenya. The study findings established that financial innovations had great impact on the financial performance of the banks. To the best of the researcher‘s knowledge, no study had been done on the effect of the effects of alternative banking channels on financial performance of listed tier 1 commercial banks in Kenya. This study therefore sought to determine the influence of alternative banking channels on financial performance of listed tier 1 commercial banks in Kenya.

2. LITERATURE REVIEW

The theory of financial intermediation:

Financial intermediaries’ theories are based on the economic theories of imperfect information that were advanced by the seminal papers of Akerlof (1970), Spence (1973) and Rothschild and Stiglitz (1976). The existence of financial intermediaries is due to the reduction in transaction and information costs that arise due to information unevenness amongst borrowers and lenders (Coase, 1937). The effective functioning of markets is assisted by financial intermediaries, and any aspects that influence the volume of credit passing through financial intermediaries can have significant macroeconomic effects. Literature has explained the existence of financial intermediaries from two points of views. In the first instance, financial intermediaries are viewed as providers of liquidity, while the second perspective focus on the financial intermediary ability to transform the risk characteristics of the underlying assets. In both instances, financial intermediation reduces the cost of channeling funds between borrowers and lenders thus occasioning a more resource allocation efficiency (Claus & Grimes, 2013).

The Agency Theory:

The agency theory is a hypothesis explaining the contractual relationship between agents and principals in a business. The theory, initially developed by Jensen & Meckling (1976), analyzes the relationship between a business and its agents with the key motivation being maximization of firm's returns more so where there is separation of ownership and control. The theory postulates that a principal passes on authority to an agent to conduct transactions and make decisions on behalf of the principal in an effort to maximize the principals' returns and profitability. However, the agency theory assumption of simplistic contractual agreements limits the theory since in reality there are complex issues surrounding the agency relationships (Jensen, 2000).

3. RESEARCH METHODOLOGY

Research Design:

This study adopted a causal research design because it enabled the study to test the cause and effect relationship between two or more variables, measures the extent of relationship between the variables and specifies the nature of functional relationship between two or more variables (Saunders, Lewis, & Thornhill, 2015). Causal research design was selected because it enabled the study test how the independent variables – alternative delivery channels determines the financial performance of listed tier 1 commercial banks in Kenya.

Target Population:

Saunders, Lewis, and Thornhill, (2015) explains that the target population should have some observable characteristics, to which the researcher intends to generalize the results of the study. The target population for this study was at two levels. The first target population was at institutional level where the study targets 6 listed tier 1 commercial banks in Kenya in operation as at 31 December 2016. The second level of target population werethe senior officersof treasury, the senior operation officers and senior finance officers in each of the six listed tier one commercial banks in Kenya of the 6 listed tier 1 commercial banks in operation in Kenya as at 31st December, 2016. In this case primary data was collected through questionnaire. The main reason for choosing the officials was because they were responsible for performance of their respective banks and had a higher level of appreciation on how alternative banking channels influence financial performance. They were also responsible for managing performance of their units through the departmental budgets and action plans.

Target Population

Bank	Population
Barclays Bank of Kenya Ltd	8
Co-operative Bank of Kenya Ltd	17
Diamond Trust Bank (K) Ltd	8
Equity Bank Ltd	10
Kenya Commercial Bank Ltd	9
Standard Chartered Bank (K) Ltd	12
TOTAL	**64**

Data analysis and Presentation:

The study adopted correlation and regression statistics to analyze the data with the help of SPSS. The dependent variable was correlated with independent variables to determine if a relationship exists between variables. Regression statistics was used to determine the significance of the relationship between variables.

Regression Model:

The study adopted a regression model to establish the relationship between alternative banking channels and financial performance of commercial banks in Kenya.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Y = is the financial performance measured using net income divided by total assets.

X_1= represents agency transactions measured using the number of transactions per day divided by total number of transactions per year.

X_2= is the amount of money transacted per day using Mobile banking divided by the total amount transacted in a year.

X_3 = is internet banking determined by the amount of money transferred using internet banking.

X_4= represents ATMs transactions measured using the number of transactions per day divided by total number of transactions per year.

β_0 = gradient of the regression measuring the amount of the change in Y associated with a unit change in X

€ = Error term within a confidence interval of 5%

4. RESEARCH FINDINGS AND DISCUSSION

Response Rate:

Collection of primary data was carried out in October 2017 using self-administered questionnaires.Sixty four (64) questionnaires were issued to randomly selected bank senior managers from six tier one listed commercial banks. Forty (40) questionnaires were returned representing a 64.5 percent response rate. The response rate is considered adequate given the recommendations by Saunders, Lewis and Thornhill (2007) who suggest a 30-40% response is adequate, while Mugenda and Mugenda advises on a response rate above 50 % being adequate. From the above two authorities, it implies that the response rate for this study was adequate.

Table: 4.1 Response Rate

Category	Frequency	Percentages
Responded Questionnaires	40	64.5%
Non- Responded Questionnaires	24	35.5%
Total	**64**	**100%**

Reliability Analysis

Reliability analysis was tested by calculating Cronbach's alpha values through Statistical Package for the Social Sciences (SPSS). Alpha values lies between zero and one with zero being no internal inconsistency and one being complete internal consistency. Thus, the higher the coefficient, the more reliable is the measure, with a value of 0.70 being sufficient (Nunally, 1978). This study adopted the alpha coefficient value of 0.7 upwards. Table 4.2 presents the alpha values of the questionnaire items.

TABLE: 4.2 Reliability Test Results.

Study Construct	Number of Items	Cronbach's Alpha Values	Decision
Agency Banking	3	0.77	Reliable
Online Banking	3	0.84	Reliable
Mobile Banking	3	0.89	Reliable
Automatic Teller Machines	3	0.81	Reliable

Table above indicates the reliability test results and the lowest alpha was 0.77 on agency banking. The highest was 0.89 on Mobile banking. This is consistent with sufficient Nunally (1978) propositions. Based on the findings, the decision was that all the study constructs were reliable.

Demographic Information:

Gender:

According to response on gender, there were more male (67.5%) than female (32.5%) who participated in the study as illustrated in Figure below. This indicates that most banks follow the one third gender rule while recruiting their staff in various capacities.

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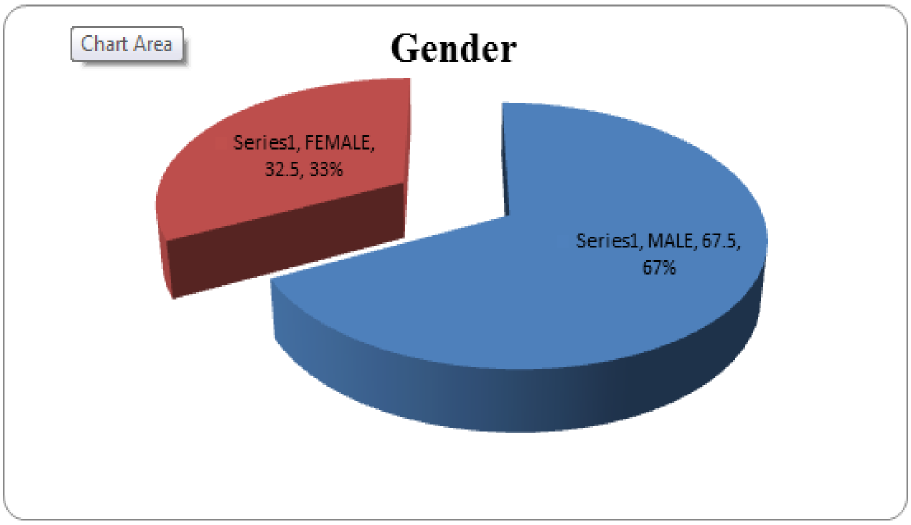

Figure 4.1 Gender Representation:

Data Analysis of Study Variables Study:

In this section, findings and discussion in order of the four specific objectives of the study are presented. Descriptive statistics and frequencies are first presented and thereafter inferential statistics. To make it simpler to analyse the data, questionnaire responses were based on Likert scale that was coded with numerical value assigned as follows: Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5

Effect of Agency Banking on Financial Performance:

The study's first objective was to establish the effect of agency banking on financial performance of listed Tier 1 commercial banks in Kenya. This first objective, just like the other three objectives, was assessed through questionnaire statements that required the respondents to indicate their extent of agreement or disagreements with the statements.

As laid out in Table below 73% of the respondents indicated that agency banking influenced performance for the bank by 73% while 27% were not taking sides. As to whether agency banking investments had payback period of less than 3 years and hence improved financial performance for the bank, 53% of the respondents agreed, 20% were neutral, while 17% disagreed. 46 % of the respondents were in agreement that Incomes from agency banking had positive impact on bank's financial performance, 7 % disagreed and another 47 % neither agreed nor disagreed. From the responses, mean score was found to be 3.50 indicating that the majority of the respondents agreed to the fact that agency banking had a positive influence on banks financial performance. The variations from the mean as indicated by the average standard deviations was 0.638 indicating that 64 % of the responses were within one standard deviation from the mean.

Table below Effect of Agency Banking On Financial Performance

NO	STATEMENT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
		%	%	%	%	%		
1	Agency banking influence reduction of operational costs and hence better financial performance for the bank.			28	70	2	3.75	0.487
2	Agency banking investments have payback period of less than 3 years and hence improved financial performance for the bank.		17	20	50	3	3.36	0.775
3	Incomes from agency banking have had had positive impact on bank's financial performance.		7	47	43	3	3.38	0.653
	Average						**3.50**	**0.638**

Effect of Online Banking on Financial Performance:

The second specific objective of the study was to determine the effect of online banking on financial performance of listed Tier 1 commercial banks in Kenya. Like the other three objectives, online banking was assessed through questionnaire statements that required the respondents to indicate their extent of agreement or disagreements with the statements.

Table below indicates the effect of online banking on financial performance. Online banking was viewed a good agent in reduction of operational costs and hence better performance by 80% of the respondents another 20% neither agreed nor disagreed with the statement. On whether Online banking investments have payback period of less than 3 years and hence improved financial performance for the bank, only thirty five percent of the respondents were in agreement while half of them were non-committal. On the other hand 15% of the respondents disagreed with the assertions. Eighty five percent of the respondents were in agreement that Incomes from online banking have had had positive impact on bank's financial performance and 12 % were neutral. An inference of a close spread around the mean of the responses can be drawn from the fact that the standard deviation was 0.642.

Other studies that had similar findings include Akram and Allam (2010) study on Jordanian banks that concluded internet banking had a great influence on the net profit margin. Onaz, Ozsoz and Helvacioglu (2008) study on Turkey's banking sector reported similar findings. The study found a direct link between internet banking and financial performance of Turkey's commercial banks.

Table Effect of Online Banking on Financial Performance

NO	STATEMENT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	S.D
		%	%	%	%	%		
1	Online banking influence reduction of operational costs and hence better financial performance for the bank.	0	0	20	75	5	3.82	0.500
2	Online banking investments have payback period of less than 3 years and hence improved financial performance for the bank.	3	12	50	35	0	3.22	0.730
3	Incomes from online banking have had had positive impact on bank's financial performance.	0	3	12	58	27	3.15	0.697
	Average						**3.40**	**0.642**

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Major Findings:

Evidence obtained from previous studies on alternative banking channels and financial performance indicates mixed results. A pilot study was carried out before this study where the validity and reliability of research instrument was tested and affirmed. The study sample had sixty four (64) questionnaires distributed and forty (40) questionnaires were returned representing a 64.5 percent response rate. The response rate is considered adequate given the recommendations by Saunders, Lewis and Thornhill (2007) Mugenda (2009).

Agency Banking:

The first objective of the study was to establish the effect of agency banking on financial performance of listed tier 1 commercial banks in Kenya.The findings revealed that agency banking had a positive influence on banks financial performance. The standard deviation was skewed towards the mean indicating that most of the responses were within one standard deviation from the mean.

Online Banking:

The second specific objective of the study sought to determine the effect of online banking on financial performance of listed tier 1 commercial banks in Kenya. Results revealed online banking had a positive influence on financial performance of listed Tier 1 commercial banks in Kenya. An inference of a close spread around the mean of the responses was drawn from the standard deviation. This means that online banking is good for skimming out income and enhancing profitability.

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Mobile Banking:

The third specific objective was to determine the effect mobile banking had on financial performance of listed tier one commercial banks in Kenya. The results revealed that mobile banking had positive impact on banks financial performance. It had strong mean score which indicated a positive influence on financial performance by mobile banking. The standard deviation was very close to mean which meant the existence of a strong and positive influence on financial performance by mobile banking.

Automatic Teller Machines:

The fourth and last specific objective sought to determine the effect ATM had on financial performance of listed tier one commercial banks in Kenya. Results obtained revealed that automatic teller machines influenced financial performance of commercial banks in Kenya. The standard deviation was indicative that the responses were within one standard deviation from the mean.

CONCLUSION:

Based on the study findings, it can be concluded that banks alternative channels influence financial performance of listed tier 1 commercial banks in Kenya. The adoption of alternative channels by listed tier 1 commercial banks has a high potential of improving financial performance and therefore the potential of maximizing shareholders wealth. The resourcefulness of the channels makes the rate of their use very high not only to the banks but also to the customers.

This perhaps explains why commercial banks in Kenya have consistently performed well compared to other sectors of the economy. Additionally, the use of the alternative channels enables bank to tap on different sources of income other than just over relying on the traditional sources like interest, trade and asset financing. Banks have been able to make more commission income from transactions done on alternative channels like; mobile phones, online, agency and ATMs.

RECOMMENDATION:

Based on the findings, the study recommends that listed tier 1 commercial banks should continuously invest in alternative channels as it would afford them a better cost control measure compared to traditional investments in brick and mortal of physical branches. This helps to minimize the cost per unit of service and hence improved financial performance for the banks. Listed tier 1 commercial banks should come up with several other ways of utilizing and returns from mobile banking and internet banking.

Agency Banking:

Since the findings show a strong and positive influence of agency banking on financial performance of listed tier 1 commercial banks in Kenya, the banks should put more effort and research on how to expand their agency banking networks across the whole country and beyond to enable improved performance as well as economic development in the country. This will also create more jobs which will go a long way in improving the economic wellbeing of the Kenyan people.

Online Banking:

Since online banking is also a phenomenon that had emerged and being embrace by most of the Kenyan people, the government should ensure that they is adequate security of the customers' funds while in the banks from cybercrimes/ hacking so as to promote consumer confidence for its use in payments and transactions. This will greatly improve its performance and also the financial performance of the commercial banks.

Mobile Banking:

Since a significant number of the Kenyan population own mobile phones, all the commercial banks should ensure their presence on mobile applications which are customer friendly in order to enhance the banking needs of the consumers as well as the banks themselves. Further the telecommunication companies should ensure strong and reliable network connectivity in the whole country so as to promote mobile banking at all the time.

Automatic Teller Machines:

The use of ATM has become common place and therefore the banks should reduce on the bureaucratic procedures of acquiring ATMs for their customers. This will ensure constant follow of funds in the banks for the consumers without hitches.

Areas for Further Research:

This study only considered Listed Tier 1 commercial banks did not include all bank innovations and a further study is recommended to include innovations like agency banking, securitization and credit guarantees and their influence on the financial performance of commercial banks. A more detailed study can be conducted to establish whether the adoption of financial innovations contributed to financial deepening in Kenya.

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