International Journal of
Finance
(IJF)

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CARI Journals

International Journal of Finance

ISSN 2520-0852 (Online)

Vol. 7, Issue No. 3, pp 98 - 111, 2022

www.carijournals.org

EVALUATION OF THE EFFECT OF FOREIGN EXCHANGE MARKET INSTRUMENTS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN MERU COUNTY, KENYA.

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ABSTRACT

Purpose: To investigate the effect of foreign exchange market instruments on financial performance of commercial banks in Meru County, Kenya

Methodology: Descriptive survey research design was used when collecting data using closed-ended questionnaires from 15 commercial banks in Meru County Kenya. The respondents were selected using stratified sampling method to have 4 units of observation such as banking operations, business development, personal banking and marketing operations. Once the strata were derived, the study used Krejcie & Morgan (1970) sampling formular to get the sampled respondents. This resulted to a sample of 55 banking operations officers, 45 business development officers, 55 personal banking officers and 72 marketing operations officers. The study further issued closed questionnaires and analysis from secondary data reports such as statement of affairs and income statements. The pre-test was done on two commercial banks in Isiolo-County. The banks were Kenya Commercial Bank and Consolidated bank. This was because Isiolo County was a county that was well developed with banks that were actively engaged in banking operations. The respondents were 6 banking operations officers, 5 business development officers, 6 personal banking officers and 9 marketing operations officers. The data from questionnaires were analyzed using descriptive statistics such as median, frequencies and percentage. Data was presented using tables. SPSS version 24 was used to analyze the data which was presented using tables. Analysis of documents was done using the ratio analysis technique.

International Journal of Finance

ISSN 2520-0852 (Online)

Vol. 7, Issue No. 3, pp 98 - 111, 2022

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Results: The results on the questionnaires indicate that most respondents agreed that there were several training forums to clients on issues pertaining foreign exchange market (mean of 3.01). However, most respondents had a contrary opinion on the government support to always maintain the value of a shilling vis-à-vis an US dollar (mean of 2.34). Additionally, the respondents indicated that the bank did not provide all information pertaining to foreign exchange (mean of 2.47). Foreign exchange market instruments had an R value of 0.756 and R-square of 0.572. This indicated that foreign exchange market instruments had an 57.2% influence on financial performance while 42.8% were on other factors not investigated in this study. The significance level was 0.000 hence below than 0.05. Therefore, the results meant that the study rejected the null hypothesis that there is no Effects of foreign exchange market instruments and financial performance of commercial banks in Meru County, Kenya.

Unique contribution to theory, policy and practice: Foreign exchange market instruments were key determinants on financial performance of a bank as long as currencies are involved. The more a bank invests in acquiring qualified personnel, updated ICT systems and reliable communication channels, the easier it will be to improve their performance. Nevertheless, this has not been the case since most banks do not have reliable systems that could support foreign exchange operation without necessarily exposing the bank to cyber fraud when seeking and consistent losses due to price volatility.

Keywords: *Foreign Exchange Market Instruments, Financial Performance, Commercial Banks, Meru County, Kenya.*

1.0 INTRODUCTION

Financial performance is defined as the ability of a commercial bank to be able to meet its ever-budding financial obligations that are as a result of its investment operations (Capital Market Authority of Kenya, 2018). The concern of performance has been fracturing many financial institutions whereby commercial banks have not been excluded from the list. Investment banks in America, are concerned on the rise of always striving to meet the international financial reporting standards-9 guidelines which has changed their models to provisioning and pressure to develop more models leading to complexity in the industry (EYGM Limited, 2018). Adding to that, there has been declined client profitability especially on forex trading; bitcoin steadiness risks; and intelligence risk culture (EYGM Limited, 2018). In Europe, there has been post Brexit uncertainty and vagueness on the direction of investments in United Kingdom particularly on currency trading (Ernest & Young, 2018). Corona virus pandemic had deteriorated investments returns in currencies due to poor risk management leading to losses in currency trades (Price Water house Coopers, 2020).

Regionally in Africa, there had been unfavorable banking policies and high inflation causing banking products such as swaps to be extremely expensive (Kong et al., 2019). Additionally, illiquid and undeveloped capital markets that supported diverse investments such as forwards and futures has been other major concerns (Price Water house Coopers, 2020). The Kenyan investment banks had been battling out with issues such as low liquidity to a point of some of them being closed down (Capital Market Authority, 2018). For example, Chase bank, Dubai bank and imperial bank were forced to close down their operations in Kenya due to liquidity concerns; low customer base; change of investment preferences by the customers; and corona virus epidemic causing commercial banks miss on foreign exchange instruments (Capital Market Authority, 2018). Foreign exchange instruments are products that allow the bank to sell and buy currencies from clients based on the prevailing market rates (OECD, 2018). Buying of currencies relate to exchange rates, forwards, futures and options.

1.2 Statement of the Problem

Commercial banks are expected to continuously develop business investment models that always provide solutions to emerging challenges (Ernest & Young AG, 2018). These models should act as a framework in guiding how and where to place investments so that they generate reliable income (Deloitte, 2018).

Despite this precise way of ensuring profitability in asset management, the banks are performing poorly financially and this attributes to high price volatility in the Kenyan securities market has negatively affected the foreign exchange instruments (Capital Market Authority, 2018). Price volatility has caused the foreign instruments' portfolio not achieve the intended purpose of earning return on investments. This has been passed on to the investors who have experienced immense losses; hence demotivating them from trusting commercial banks to advise them on what area to invest leading to loss of business (Cytonn Investment, 2018). Failure to address this problem, will result to massive loss of clients, which will lead to declined profits and stakeholder value margins.

Various studies done such as Alhassan and Biekpe (2019), Deloitte (2016) have critiqued various asset manager's investment techniques towards boosting financial performance by turning illiquid assets into liquid assets through investing in low generating ventures such as foreign exchange products, investment banks not quickly adopting to digitalization and low awareness on real estate instruments being associated with the rich. However, the studies did not address the effect of foreign exchange market instruments on financial performance of commercial banks in Meru County, Kenya

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1.3 Purpose of the Study

To investigate the effect of foreign exchange market instruments on financial performance of commercial banks in Meru County, Kenya

1.4 Hypothesis

Ho: Foreign exchange market instruments have no significant effect on financial performance of commercial banks in Meru County, Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

Technology adoption model was developed by Davis (1989). The model evaluates how different clients acknowledge to utilize an introduced innovation. It clarifies further that when clients are given innovation, they consider various variables before they can accept to utilize this innovation. The model expresses that the clients think about two components before embracing a given innovation. Seen value and ease of utilization Seen value is the degree wherein a client accepts that a specific framework will upgrade the activity execution of what they are doing while ease of usability is whereby the client accepts that the framework is difficult to comprehend. The traditional ways of trading currencies in a trading pit are being overtaken by e-forex digital platforms. These platforms have improved the decisions made hence attaining a breakeven point with minimum expenses. Therefore, commercial banks have aligned themselves to be able to facilitate digital asset transactions that customers are undertaking.

2.2 Empirical Review

European Central Bank [ECB] (2019) on the anatomy of the Euro area interest rate swap market, provides evidence that Europe legislation put into place regulations that mandates banks and non-banks to begin clearing swaps through one clearing central house. This regulation has seen European banks becoming active in all segments of the interest rate swap Euro market where non-banks had taken control of exposing the financial system to default risk. However, despite this magnificent move in regulation, there is still huge dispersion of interest rate swap operation prices, which is somewhat caused by bank physiognomies, like the leverage ratio.

From an environmental approach point of view, Sommer et al. (2019) did a study on how bilateral debt-for-nature swaps can be used in hedging against forest loss which was a cross-national analysis. Sommer et al. (2019), applied a two-step least square regression model to examine a model of 85 low- and middle-income nations in the year 2001 to 2014. They discovered that advanced volumes of debt decrease and advanced volumes of protection reserves were produced as a consequence of such swaps and were related with lesser rates of forest forfeiture. The study

relied on theoretical and past literature to anchor its conclusion. This approach is criticized since past literature may contain wrong concepts which are under-developed. Anchoring a study on a wrong concept may be misleading and biased to the future generations (Lieder et al., 2018).

Unedited results for six months ending June 2019 that were published by Gold Fields [GF] intrigued a very interesting fact that hedging gold in developing countries such as Ghana and South Africa by cash settled average rate forwards derivatives caused mark to market value to be negative. That is $8 million and $11 million for Ghana and South Africa respectively. Despite that, hedging using other derivatives like swaps and options provided a positive mark to market on commodities such as gold and oil in the said countries. This creates a controversy since hedging commodity risks using derivatives according to Deloitte (2019) which is a manual of hedging commodity price risk management in corporates, should improve their mark to market values. However, in this case forward derivatives did not hedge positively on gold and oil while other types of derivatives such as swaps and options improved and made the mark to market value positive. There is a need to come up with ways of ensuring hedging using derivatives works efficiently and evenly.

In Kenya, Mugi and Okiro (2021) examined how commercial bank's performance was influenced by risk management practices linked to foreign exchange. The study targeted 43 commercial bank's performances for the period between 2009-2014. The practices under the scope of the study included currency swaps, options, and forward contracts. To enable this, Mugi and Okiro (2021) used secondary data from financial reports such as balance sheets and income statements. The study revealed that currency swaps and forward contracts improved performance such that rate of return was high. Nevertheless, the rate of return remained constant when influence of options was assessed. Mugi and Okiro (2021) paid attention to only three types of foreign exchange practices such as currency swap, options and forward contracts hence not including future contracts. Additionally, the study only used one measure of financial performance which was rate of return and did not include other measures such as net profit margin, quick ratio and debt to equity ratio.

3.0 RESEARCH METHODOLOGY

Descriptive survey research design was used when collecting data using closed-ended questionnaires from 17 commercial banks in Meru County Kenya. The respondents were 63 branch banking operations officers, 51 branch business development officers, 64 branch personal banking officers and 89 marketing operations officers in the commercial banks located in Meru County. The study used Krejcie & Morgan (1970) table to obtain a sample of 15 banks. Later on, the specific respondents were selected suing stratified sampling method to have 4 units of observation such as banking operations, business development, personal banking and marketing operations. Once the strata were derived, the study used Krejcie & Morgan (1970) sampling formular to get

the sampled respondents. This resulted to a sample of 55 banking operations officers, 45 business development officers, 55 personal banking officers and 72 marketing operations officers. The study further issued closed questionnaires and also analyze secondary data from reports such as statement of affairs and income statements. Data was presented using tables. The pre-test was done on two commercial banks in Isiolo-County. The banks were Kenya Commercial Bank and Consolidated bank. This was because Isiolo County was a county that was well developed with banks that were actively engaged in banking operations. The respondents were 6 banking operations officers, 5 business development officers, 6 personal banking officers and 9 marketing operations officers. The data from questionnaires were analyzed using descriptive statistics such as median, frequencies and percentage. SPSS version 24 was used to analyze the data which was presented using tables. Analysis of documents was done using the ratio analysis technique.

4.0 RESULTS

4.1 Reliability Statistics

The study conducted a pre-test study in two commercial banks in Isiolo-County. The pre-test respondents were 6 banking operations officers, 5 business development officers, 6 personal banking officers and 9 marketing operations officers. A total of 26 respondents answered the questionnaires. Table 1 indicates the reliability results.

Table 1: *Reliability Results*

Instrument	Cronbach's Alpha	N of Items
Questionnaire	.841	20

Table 1 indicates that the 26 issued questionnaires had a Cronbach's Alpha value of 0.87 which was above 0.7 indicating that they were reliability to be used in the main study. According to Taber (2018), an instrument is deemed reliable if it has a Cronbach's Alpha value of more than 0.7 to 1. Therefore, based on the results it was clear that the proposed questionnaires would be effective in addressing the problem through offering insightful trajectory towards how the problem could be solved.

4.2 Response Rate

The study had a sample of 227 who answered questionnaires. These respondents included 55 banking operations officers, 45 business development officers, 55 personal banking officers and 72 marketing operations officers who answered the questionnaires. The study was able to collect 173 filled in questionnaires which translated to 76% response rate. The respondents who answered

the questionnaires were 42 personal banking officers, 34 business development officers, 42 personal banking officers and 55 marketing operations officers.

4.3 Descriptive Statistics of Financial Performance

Financial performance was the dependent variable. It had indicators such as capital adequacy ratio, quick ratio, debt to asset ratio and return on assets. The study collected data in two ways which were through analysis of reports and questionnaires. Table 4.7 indicates the analysis of return on assets, gross profit ratio and equity ratio from various reports from commercial banks.

Table 2: *Descriptive Statistics of Financial Performance*

Financial Indicators	N	Mean
ROA	**15**	4.4
GPR	**15**	2.9
ER	**15**	3.8

As per Table 2 return on assets had a mean of 4.4 and Equity ratio had a mean of 3.8. However, it was noted that the gross profit ratio has a low mean of 2.9. Having a record of a low gross profit indicated that most banks were not able to generate adequate income through the asset management instruments such as bonds, money market, real estate and foreign exchange market instruments. This was because the cost of running the various types of assets was more than the profit they were generating. Additionally, the legal requirements needed to process an asset such as a bond contract was very expensive to maintain hence diminished losses in the overall gross profit ratio. In support with the findings, Kapoor (2011) also found out that for a United Kingdom bank to become successful in rolling out bank-focused model on banking products such as mobile banking, cost versus income ratio needed to be known. This is because rolling out any banking product required exploration on whether the bank was losing more than it gains.

4.4 Descriptive Statistics of Foreign Exchange Market Instrument

The foreign exchange market instruments had indicators such as exchange rates, exchange forwards, exchange futures and exchange options. The study collected data using Ordinal Likert Scale where 1- strongly disagree, 2- disagree, 3- neutral, 4-agree and 5- strongly agree as shown on Table 3.

International Journal of Finance
ISSN 2520-0852 (Online)
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Table 3: *Descriptive Statistics of Foreign Exchange Market Instruments*

Statements N=173	**1**	**2**	**3**	**4**	**5**	**Mean**
This bank trades in foreign exchange instruments	19(11%)	78(45%)	0(0%)	76(44%)	0(0%)	**2.77**
The bank ensures that it follows capital market regulations	17(10%)	72(41%)	3(2%)	74(43%)	7(4%)	**2.90**
The government supports the market through constantly managing the value of a shilling	71(41%)	34(20%)	28(16%)	18(10%)	22(13%)	**2.34**
Provision of product information	66(38%)	34(20%)	21(12%)	30(17%)	22(13%)	**2.47**
There is a central clearing unit through which all instruments are cleared	13(7%)	70(41%)	6(4%)	78(44%)	6(4%)	**2.97**

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ISSN 2520-0852 (Online)

Vol. 7, Issue No. 3, pp 98 - 111, 2022

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There are several training forums to clients	90(52%)	34(20%)	21(12%)	28(16%)	0(0%)	**3.01**

The results indicated on Table 3 indicate that most respondents agreed that there were several training forums to clients on issues pertaining foreign exchange market (mean of 3.01). However, most respondents had a contrary opinion on the government support to always maintain the value of a shilling vis-à-vis an US dollar (mean of 2.34). Additionally, the respondents indicated that the bank did not provide all information pertaining to foreign exchange (mean of 2.47).

The two statements that were disagreed by the respondents indicated that the concern of foreign exchange instruments not improving performance was caused by lack of government intervention when a shilling lost its value and lack of full provision of information by the banks to investors. According to the respondents, a shilling kept on swindling into less value though the government was always saying it's in control. For a period of 20 years, a dollar that had a value of 84/1 dollar has crossed the 110/1dollar mark in the 21st century. In kind of admission to this concern, the CBK (2018) report agreed that a shilling declined in value only that this time round it was pegged to covid-19 pandemic.

Additionally, most banks believed that investors would get similar information related to foreign exchange market on capital market and central bank reports hence lack of much need to provide it in depth. This was an argument also brought forward by a report by Capital Market Authority (2018). According to the report, low uptake of financial market products was due to limited information on what, how and why these products exist in the first place. The banks relied on the CMA to provide this information which slowed down the uptake programs.

4.5 Model Summary of Foreign Exchange Market Instruments

The study conducted a model summary to examine the level of influence that foreign exchange market instruments had on financial performance. Table 4 indicates the results of the analysis

Table 4: *Model Summary of Foreign Exchange Market Instruments*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756[a]	.572	.465	2.83952

a. Predictors: (Constant), Foreign Exchange Market Instruments

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According to Table 4, foreign exchange market instruments had an R value of 0.756 and R-square of 0.572. This indicated that foreign exchange market instruments had an 57.2% influence on financial performance while 42.8% were on other factors not investigated in this study. From the results, it is evident that foreign exchange market instruments were a struggle to sell in the banks. This is because of lack of clear information on how the products work, high risk and unreliable organization policies on loss management.

4.6 ANOVA of Foreign Exchange Market Instruments

The study conducted an Analysis of Variance (ANOVA) to answer the hypothesis. The study's null hypothesis stated that foreign exchange market instruments that bonds instruments had no effect on financial performance of commercial banks in Meru County, Kenya. Table 4.20 indicates the outcome.

Table 5: *ANOVA of Foreign Exchange Market Instruments*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	104.124	1	104.124	12.914	.000[b]
	Residual	1378.755	172	8.063		
	Total	1482.879	173			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Foreign Exchange Market

The results from Table 5 indicate that the significance level was 0.000 hence below than 0.05. Therefore, the results meant that the study rejected the null hypothesis that foreign exchange market instruments had no effect on financial performance of commercial banks in Meru County, Kenya. The results mean that foreign exchange market is a key determinant on financial performance of a bank as long as currencies are involved. The more a bank invests in acquiring qualified personnel, updated ICT systems and reliable communication channels, the easier it will be to improve their performance. Nevertheless, this has not been the case since most banks do not have reliable systems that could support foreign exchange operation without necessarily exposing the bank to cyber fraud and consistent losses due to price volatility (Chipeta & Muthinja, 2018).

International Journal of Finance

ISSN 2520-0852 (Online)

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4.7 Regression Coefficients of Real Estate Investment Trusts and Financial Performance

The study conducted a regression coefficient analysis. The analysis was guided by the general research model of the study as shown in Table 6.

Table 6: *Regression Coefficients of Foreign exchange and Financial Performance*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.945	2.419		5.352	.127
	Foreign exchange	.059	.120	.053	.490	.625

a. Dependent Variable: Financial performance

The study had a model which indicated that financial performance = C + β1X1, where; X4 = Foreign exchange instruments; C = constant coefficient (intercept) and β = slope coefficient of independent variables. When equated with values financial performance = C12.945+β1(0.059). This indicated that one value of financial performance was increased by 0.059. That means that foreign exchange instruments Bonds was insignificant.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of the findings

The results on the questionnaires indicate that most respondents agreed that there were several training forums to clients on issues pertaining foreign exchange market (mean of 3.01). However, most respondents had a contrary opinion on the government support to always maintain the value of a shilling vis-à-vis an US dollar (mean of 2.34). Additionally, the respondents indicated that the bank did not provide all information pertaining to foreign exchange (mean of 2.47). Foreign exchange market instruments had an R value of 0.756 and R-square of 0.572. This indicated that foreign exchange market instruments had an 57.2% influence on financial performance while 42.8% were on other factors not investigated in this study. The significance level was 0.000 hence below than 0.05. Therefore, the results meant that the study rejected the null hypothesis that there is no Effects of foreign exchange market instruments and financial performance of commercial banks in Meru County, Kenya.

5.2 Conclusion

The conclusions made on foreign exchange market instruments is a key determinant on financial performance of a bank as long as currencies are involved. The more a bank invests in acquiring qualified personnel, updated ICT systems and reliable communication channels, the easier it will be to improve their performance. Nevertheless, this has not been the case since most banks do not have reliable systems that could support foreign exchange operation without necessarily exposing the bank to cyber fraud when seeking and consistent losses due to price volatility.

5.3 Recommendations and Contributions of the Study

The banks staff should be trained through by the initiative of the management on foreign exchange market. This program should be continuous as a way of sharpening their skills and knowledge of forcing exchange. This will enable the staff have required skills to trade effectively in the foreign exchange market. The bank should see the proficiencies of a trading software and ICT infrastructure to enable them in interpreting and predicting how the prices are expected to behave.

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