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Influence of Asset Allocation on Financial Performance of Commercial Banks in Nairobi County, Kenya

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Abstract

The study evaluated the influence of asset allocation on financial performance of commercial banks in Nairobi County, Kenya. Descriptive research design was used in data collection process among 38 commercial banks in Nairobi County, Kenya. Therefore, the study obtained a sample size of 11 banks using a simple random sampling method whose 24 portfolio managers, 21 risk officers, and 36 portfolio management officers, were used as respondents. Data was analyzed using descriptive statistics and regression analysis. The R-value was 0.702 while R-square was 0.692, which indicated that asset allocation had a 69.2% influence on financial performance. The p-value was 0.004 which was less than 0.05 hence enabling the study to reject the null hypothesis that asset allocation had no significant influence on financial performance of commercial banks. The study concludes that the institutions had minimally invested in an advanced variety of investment software that would aid them in allocating assets to various investment vehicles. The banks had invested in establishing ICT hardware but not in the advanced software part. As a result, the staff were overburdened with portfolios that required them to be present at all times for monitoring. Therefore, when they burnt out, most of them resigned for more efficient investment institutions, thereby leaving the client's assets at risk of losses. The study recommends that the bank board should release funds to finance various installations of updated software. The management should also go ahead and source trainers to train the investment staff on how best to utilize the software to make the best out of it.

Keywords: *Asset Allocation, Financial Performance, Commercial Banks, Nairobi County, Kenya*

1.0 Introduction

Financial Performance is defined as a measure of a bank's fiscal health that assesses how well its employees maximize investors' wealth (Kenya Bankers Association, 2019). This could be in terms of banking and as well as investment operations. Financial performance of commercial banks has faced quite a number of challenges related to asset allocation.

In global nations like America, there has been a loss of commissions and interest in new assets that clients could invest in since they have not been oriented (Federal Deposit Insurance Corporation, 2019). In United Kingdom [UK], there have been a lot of work-related errors since the staff has not been trained on use of new technological portfolio management systems that allocate assets (Bank for International Settlements [BIS], 2020). There have been volatile

markets in China that have forced asset portfolios to make losses during downtimes hence declining investments (Ruzgar & Chua-Chow, 2023).

Regionally, in South Africa, portfolio managers have made blind financial decisions since they have not been furnished with updated information that changes in minutes. This is because they lack updated software that easily provides the information (World Bank, 2022). In Ghana-West Africa, clients still lack awareness of how portfolio management of assets works and the intricacies involved (Koranteng, 2015). This leaves a huge untapped market hence the loss of potential income. In Tanzania-East Africa, the banks lack portfolio specialists who see to it that the asset allocation decision made is not expert-inspired hence profitability is still low (Abebe, 2022).

Locally in Kenya, there have been experiences of inflation hence making clients minimize investing their resources into improving their asset allocation portfolios due to declined shilling value (CBK, 2021). Banks have also battled with tough government regulations that are required when operating asset management (Munyua & Lango, 2023). These issues have significantly affected the asset allocation process that involves keenly balancing investments by awarding different percentages on different classes of assets like bonds, cash, shares, and stocks among others (ECMI, 2020). This is to achieve a client's financial goal while at the same time minimizing the risks therein.

1.1 Problem Statement

In the core of doing business, commercial banks are supposed to always guarantee the safety of deposits and consistency in growth of revenue to maintain a robust liquidity position. Therefore, this could be achieved through employing clear portfolio management techniques that involve asset allocation. They ensure clients' investments are articulately allocated in a profitable class of assets in acceptable proportions that do not expose the bank to various financial risks (Okwaro, 2021).

Regrettably, the liquidity of commercial banks in Kenya has continued to decline even after heavy investments have been injected into their financial systems (CBK, 2021). In as much as the liquidity of commercial banks was above the minimum threshold of 20% required, it declined from 57% in 2021 to 52.5% in 2022, which is a deterioration of 4.5% (CBK, 2021). This has partially been brought about by poor asset allocation that has failed to apply precise diversification techniques, hence exposing the banks' resources to financial risks. The inability to identify, assess, and control risk has resulted in high losses which have further jeopardized the bank's financial position to manage its liabilities.

1.2 Purpose of the Study

To evaluate the influence of asset allocation on financial performance of commercial banks in Nairobi County, Kenya

1.3 Hypothesis of the Study

H_{01}: Asset allocation had no significant influence on financial performance of commercial banks in Nairobi County, Kenya.

2.0 Literature Review

2.1 Theoretical Review

Markowitz Portfolio Theory was developed by Markowitz (1952) and it states that investors' behavior when deciding to invest is not only anchored on the rate of return but also mixing low-risk assets to achieve the ideal portfolio. As per Markowitz (1952), an investor's decision

to allocate their money to the choice of assets was mainly affected by their probability of yielding maximum returns and the point where risk was maintained at a minimum. This means that investors could ensure that they had maintained a less risky class of assets in their portfolio which improved their chances of gaining more on the investments placed (Markowitz, 1959).

This theory articulated asset allocation in the sense that, when portfolio managers were keenly balancing client's investments, they did so to maximize returns. Through doing so, they were able to award different percentages on different classes of assets like bonds, cash, shares, and stocks among others. This is to achieve a client's financial goal while at the same time minimizing the risks therein. In the long run, the portfolio that a client possessed had a high chance of yielding profits while at the same time taking keen note of any slight risks involved. To be in a position of knowing which class of assets required a certain allocation of a percentage of resources, necessitated careful examination of the risks involved and the risk tolerance level of the client. If the client was risk averse, they could have issues with higher percentages on risky assets such as securitized loans that were volatile.

2.2 Empirical Review

A report by ECMI (2020) examined how European institutions were allocating assets. The report assessed different asset allocations such as retail investors, asset managers, pension funds, and insurance corporates. According to ECMI (2020), there have been both advantages and limitations affecting each category as far as asset allocation being done. Therefore, in relation to asset managers where commercial banks were directly involved, ECMI (2020) pointed out that they needed to mix assets based on an index, available cash, and factor-anchored strategies.

In addition, Okwaro (2021) evaluated how Africa-based frontier market investment decisions were affected by policies related to asset allocation. The study was set to explore how Markowitz's mean-variance optimization [MVO] model was performing. Secondary data sets from investments made between 2013 to 2020 were used. From the findings, found that investors were not maximizing the use of MV model since it was limited in high estimation error in its covariance estimator as compared to robust estimator variance.

Additionally in Kenya, Mokaya and Nyamute (2020) explore how Unit trusts' performance was affected by asset allocation. The study was conducted over five months through descriptive research design. Secondary sources were used to provide data for the study. According to Mokaya & Nyamute (2020), financial performance was improved when investors combined bonds emanating from corporates, bonds emanating from government, equity, and money market securities. Additionally, other elements like portfolio managers' experience, inflation level, and timeframe of placing the investment dictate a lot of its subsequent performance. Nevertheless, Mokaya & Nyamute (2020) assessed only unit trust schemes in Kenya and could have compared the performance with international unit trusts since the data was secondary. This could have provided more precise factors that affect unit trust schemes entirely.

3.0 Methodology

A descriptive research design was used in data collection process among 38 commercial banks in Nairobi County, Kenya. The research participants were 81 portfolio managers, 69 risk officers, and 119 portfolio management officers. The study used Krejcie and Morgan (1970) sampling formula to obtain a sample size of 67 portfolio managers, 58 risk officers, and 91 portfolio management officers, selected using a simple random method. Notably, questionnaires and secondary data collection sheets were used in collecting data. Further, a pilot study was done at Faida investment bank located in Nairobi County. Therefore, the pilot

test study comprised 7 portfolio managers, 6 risk management officers, and 9 portfolio management officers. Thereafter, reliability and validity were measured. Notably, descriptive statistics, linear and multiple regressions were analyzed. Results were presented using tables and explanations.

4.0 Results and Discussion

4.1 Response Rate

The study's sample size was 67 portfolio managers, 58 risk officers, and 91 portfolio management officers hence a total of 216 participants. Table 1 reveals the response rate based on the returned questionnaires.

Table 1: Response Rate

Respondents	Sampled	Responded	Percentage
Portfolio managers	67	43	64%
Risk officers	58	36	62%
Portfolio management officers	91	84	92%
Total	**216**	**163**	**75%**

Table 1 reveals that the returned questionnaires were 163 which indicates a 75% response rate. Therefore, from the results, it is evident that there was a considerably high response rate. This is because Mugenda and Mugenda (2003) poised that when the response rate is above 75%, it indicated an excellent response rate. The main reason for a high response was because the issue of declining liquidity caused partially by a poor asset allocation that has failed to apply precise diversification techniques is a major issue that bankers would be interested in identifying the solution.

4.2 Reliability Test Results

The study conducted a pilot study at Faida investment bank located in Nairobi County, Kenya. The pilot-test respondents comprised 7 portfolio managers, 6 risk management officers, and 9 portfolio management officers. Table 2 indicates the reliability test results.

Table 2: Reliability Test Results

Variable	Cronbach Alpha	No of Item
Asset allocation	0.827	22
Financial performance	0.848	22

Table 2 reveals that Cronbach's Alpha for asset allocation was 0.827, and financial performance was 0.848. Therefore, according to Taber (2018), when the coefficient ranged from 0.7 to 1, it indicated reliable instruments and less than 0.7 indicated unreliability. In regards to this, the study's questionnaires were reliable to be re-used in the main study and in which viable results would be derived.

4.3 Descriptive Results of Financial Performance

The study further asked descriptive questions from various respondents. The questionnaire had a five Likert scale where 1 was strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree. The results are indicated in Table 3.

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Table 3: Financial Performance

Statements N=163	1	2	3	4	5	Mean
Asset allocation improves financial performance	1 (1%)	12 (7%)	0 (0%)	25 (15%)	125 (77%)	4.60
Diversification in portfolio management improves financial performance	1 (1%)	23 (14%)	0 (0%)	49 (30%)	90 (55%)	4.25
Risk management improves financial performance	77 (47%)	38 (23%)	0 (0%)	44 (27%)	4 (3%)	2.93
Liabilities management improves financial performance	6 (4%)	9 (6%)	50 (31%)	30 (18%)	68 (41%)	3.01
There are qualified staff to ensure that high performance is achieved.	2 (1%)	42 (26%)	0 (0%)	25 (15%)	94 (58%)	3.58

The results presented in Table 3 indicate that 125(77%) respondents strongly agreed while 25(15%) agreed on a mean of 4.60, that asset allocation had improved performance. Further, 90(55%) respondents strongly agreed while 49(30%) agreed that diversification in portfolio management had improved performance. This proved that the banks had employed qualified staff who were well-trained to allocate and diversify the client's investments effectively. This in turn improved and attracted clients who entrusted the bank with more of their resources for investment purposes hence increased performance.

Nevertheless, 77(47%) respondents strongly disagreed and 38(23%) disagreed that the implemented risk management strategies had improved performance. This meant that even though the banks had qualified staff to make professional investment decisions on portfolio management, various assets were engulfed with numerous risks such as inflation, market, interest rate, credit, and strategic risks. This was partly due to a lack of focus on being on the lookout for any potential risk among staff and poor orientation of management tools that could be used to mitigate various risks hence even though risk is identified, there is very little that could be done.

Further, the poor communication from the management to staff was partly to blame for expressing various concerns on how risk was managed. To sum everything up, the policy framework on risk management was of great concern since it did not cover remedies that should be implemented on various sensitive risks emanating in the course of managing portfolios. In agreement with the findings, Kamande et al. (2016) also revealed that one of the causes why Chase Bank was closed in Kenya is due to poor risk management of its portfolios leading to extremely low revenue generation from various investments made from the banking operations.

4.4 Descriptive Results of Asset Allocation

Asset allocation was an independent variable that was measured through, strategic allocation, tactical allocation, dynamic allocation, and insured allocation. The study collected data using a questionnaire that had a five Likert scale where 1 was strongly agreed, 2-agree, 3 was neutral, 4-agree, and 5 strongly agree. The results are indicated in Table 4.

Table 4: Asset Allocation

Statements N=163	1	2	3	4	5	Mean
Equipment of ICT to place investment and enable monitoring based on the desired strategies	19 (12%)	83 (51%)	59 (36%)	2 (1%)	0 (0%)	2.12
Consultation with clients on market price changes to suggest rebalancing of allocated assets	0 (0%)	14 (9%)	2 (1%)	20 (12%)	127 (78%)	4.60
Liberty to change various asset allocations in incorporation of dynamic strategies	4 (3%)	0 (0%)	0 (0%)	12 (7%)	147 (90%)	4.83
Investment in portfolio management software to enable elimination of risky assets	78 (48%)	41 (25%)	1 (1%)	33 (20%)	10 (6%)	2.66
Training to investment staff on portfolio management	0 (0%)	0 (0%)	65 (40%)	80 (49%)	18 (11%)	3.89

The results presented in Table 4 indicate that 147(90%) respondents strongly agreed while 12(7%) agreed on a mean of 4.83, that clients were at liberty to change various asset allocations in incorporation of dynamic strategies. Further, 127(78%) respondents strongly agreed while 20(12%) agreed on a mean of 4.60, that portfolio management involved consulting with clients on market price changes on their investments to suggest rebalancing of allocated assets. The results indicated that the banks had made recognizable steps towards ensuring that clients are informed of every action taken on their investments and as well as incorporation of their decisions towards changing the way assets have been allocated. In agreement, Okwaro (2021) revealed that policy structure that involves articulate asset allocation in Africa began by acknowledging what the clients want in terms of being flourished with information to make impactful decisions towards their investments.

Nevertheless, 19(12%) respondents strongly disagreed while 83(51%) disagreed on a mean of 2.12, that the banks had equipped the latest ICT to place investments and enable monitoring based on the desired strategies. In addition, 78(48%) respondents strongly disagreed and 33(20%) disagreed on a mean of 2.66, that the banks had invested in portfolio management software to enable elimination of risky assets hence insuring the assets of the clients. This indicated that commercial banks were yet to fully incorporate ICT infrastructure that is dynamic to aid in asset allocation. Additionally, the banks fell short in using updated and current portfolio management software that would enable them to make decisions.

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The main concern was that the institutions had minimally invested in an advanced variety of investment software that would aid them in allocating assets to various investment vehicles. The banks had invested in establishing ICT hardware but not in advanced software part. As a result, the staff were overburdened with portfolios that required them to be present at all times for monitoring. Therefore, when they burnt out, most of them resigned for more efficient investment institutions. Considerably, Oluseyi (2022) argued that the main thing that enabled asset allocation strategies to work in Nigeria Stock Exchange was due to adequate investment in not only ICT hardware but also advanced portfolio software.

4.5 Regression Analysis

The study analyzed to assess the level of influence that asset allocation had on financial performance as indicated in Table 5.

Table 5: Model Summary; Asset Allocation and Financial Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.832[a]	.692	.678	2.73337	1.624

a. Predictors: (Constant), Asset Allocation
b. Dependent Variable: Financial Performance

According to Table 5, the R value was 0.702 while R-square was 0.692. This indicated that asset allocation had a 69.2% influence on financial performance and the other 30.8% were other aspects not considered in this study. Additionally, the Durbin Watson value of 1.624 signified a positive correlation between asset allocation and financial performance. A past study such as Mokaya et al. (2020) found that asset allocation dictated 47.9% influence on unit trust schemes' financial performance. The difference was that Mokaya et al. (2020) concentrated on specific assets such as corporate and treasury bonds, money market, and equity as part of the indicators but the current study was more into the various strategies used in allocation of assets such as strategic, tactical, dynamic and insured allocations.

Table 6: ANOVA; Asset Allocation and Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.153	1	62.153	8.319	.004[b]
	Residual	1202.878	162	7.471		
	Total	1265.031	163			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Asset Allocation

According to Table 6, the p-value was 0.004 which was less than 0.05 hence enabling the study to reject the null hypothesis that asset allocation had no significant influence on financial performance of commercial banks. This means that there was a positive significant influence of asset allocation on financial performance. This meant that the various asset allocation strategies such as strategic allocation, tactical allocation, dynamic allocation, and insured allocation were effectively working towards enhancement of the financial performance. In comparison, Okwaro (2021) also found that financial institutions' performance was positively affected by considering policy changes on various alternative asset allocations.

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The study was guided by a mode whereby Y = C+ β1X1. This is where: Y = Financial Performance, β*i* = Coefficients to be estimated, C= Constant, and XI= Asset allocation. The study examined regression coefficient metric to ascertain the coefficients of the model and the results are presented in Table 7.

Table 7: Regression Coefficients; Asset Allocation and Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.810	2.332		6.350	.000
	Asset Allocation	.175	.222	.131	.788	.432

a. Dependent Variable: Financial Performance

According to Table 7, Constant =14.810, and asset allocation=0.175X1. Therefore, when equated to the model Y=14.810C+0.175X1The results mean that a unit of asset allocation, increased financial performance by 14.810C+0.175X1.

5.0 Summary

The questionnaire results indicated that 147(90%) respondents strongly agreed while 12(7%) agreed on a mean of 4.83, that clients were at liberty to change various asset allocations in incorporation of dynamic strategies. Further, 127(78%) respondents strongly agreed while 20(12%) agreed on a mean of 4.60, that portfolio management involved consulting with clients on market price changes on their investments to suggest rebalancing of allocated assets. Nevertheless, 19(12%) respondents strongly disagreed while 83(51%) disagreed on a mean of 2.12, that the banks had equipped latest ICT to place investments and enable monitoring based on the desired strategies. In addition, 78(48%) respondents strongly disagreed and 33(20%) disagreed on a mean of 2.66, that the banks had invested in portfolio management software to enable elimination of risky assets hence insuring the assets of the clients. Further, the R-value was 0.702 while R-square was 0.692, which indicated that asset allocation had a 69.2% influence on financial performance. Additionally, the Durbin Watson value of 1.624 signified a positive correlation between asset allocation and financial performance. The p-value was 0.004 which was less than 0.05 hence enabling the study to reject the null hypothesis that asset allocation had no significant influence on financial performance of commercial banks.

6.0 Conclusion

The study concludes that the institutions had minimally invested in an advanced variety of investment software that would aid them in allocating assets to various investment vehicles. The banks had invested in establishing ICT hardware but not in advanced software part. As a result, the staff were overburdened with portfolios that required them to be present at all times for monitoring. Therefore, when they burnt out, most of them resigned for more efficient investment institutions, thereby leaving the client's assets at risk of losses.

7.0 Recommendations

The study recommends that the bank board should release funds to finance various installations of updated software. The management should also go ahead and source trainers to train the investment staff on how best to utilize the software to make the best out of it. The contribution to the study is that human resource management should ensure that they employ more qualified investment staff to facilitate staff to work on shifts hence articulate concentration on portfolio management.

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