

## Influence of Portfolio Diversification on Financial Performance of Mutual Funds in Nakuru County, Kenya

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**ABSTRACT:** The financial performance of mutual fund is measured in terms of capital growth and periodical returns for growth and value funds respectively. Despite their late entry in the market, mutual funds have experienced a tremendous growth. This can be proven by the increased number of players and type of funds that are available. However more than 60 percent of funds did not match their market performance. The continued poor performance of mutual funds has resulted to lack of interest and confidence of investors, inefficiency in mutual funds management and imbalanced investment of available funds. The study sought to determine the influence of portfolio diversification on financial performance of mutual funds in Nakuru County, Kenya. The study specifically sought to assess the influence of portfolio diversification in bonds and diversification in shares on financial performance of mutual funds in Nakuru County, Kenya. The study adopted modern portfolio theory and arbitrage pricing theory. The study adopted the descriptive research design. The target population was 10 branch managers, 25 finance officers, 21 pension officers, 28 business development manager and 10 operations officers in mutual funds institutions therefore the total population of the study was 94 respondents. Nassiuma's (2000) formula was used to get a sample size of 51 employees. The study made use of both primary and secondary data. Primary data was collected using structured questionnaires. Secondary data was collected from annual financial reports of the mutual funds. Quantitative data was analyzed by use of Statistical Package for Social Sciences (SPSS) version 24. Both descriptive and inferential statistics was employed in the study. Descriptive statistics involved the use of proportions and frequencies, measures of central tendencies (mean) and measures of dispersion (standard deviation). Data was presented in form of tables. The findings indicated that there exists a strong positive and significant relationship between portfolio diversification in bonds and financial performance of mutual funds with a regression coefficient of 0.641. The study also noted that there existed a positive, moderate statistically significant relationship between diversification in shares and financial performance of mutual funds ( $r=0.597$ ,  $P=0.018$ ). The researcher recommended that mutual fund managers should adopt diversification policies to mitigate economic changes in different industries. Investing in different industries that are negatively correlated eliminates systematic risk. The inflation rate is less felt in some industries than others hence a diversified portfolio will achieve better returns than undiversified ones.

**Keywords:** *Financial Performance, Bonds, Shares and Portfolio Diversification*

### I. INTRODUCTION

#### 1.1 Background of the Study

According to Cernas (2013) portfolio diversification as a strategy of managing portfolio through bringing together diverse assets to so as to lower the general risk associated with investment portfolio. Portfolio diversification is a way of managing a given portfolio by diminishing instability and risk of a given set of portfolio of a given set of unlike investments, assets or products (Mutega, 2016). It entails the process of bringing together diverse assets to lower the general risk associated with the entire portfolio of an organization. Diversification of an organization's portfolio is necessary for maximum revenue realization given some minimum risk is allowed by a combination of different classes of elements of a particular portfolio. Diversification is a portfolio strategy that is designed and pursued in the financial industry to cut down on risk, increase mutual fund revenues, reduce volatility of profits and enhance the overall performance by combining various investments, assets or products (Rop, Kibet & Bokongo, 2016). The benefits of portfolio diversification are based on the principle that if securities in a portfolio are less than perfectly correlated, adverse movements in the return on any constituent security are somewhat counterbalanced by favorable realization in some of the

other securities in the portfolio. Kamwaro (2013) contends that there is a strong relationship between financial performance and the size of investment one holds in a portfolio thereby contributing to the fact that diversification affects portfolio returns (Nyora,2015).

Bonds are a form of debt presented by organizations to individual and institutional investors (Odhiambo, 2013). Unlike shares, money brought in from the bonds sale should be paid back with interest exceeding a specific period of time. Bonds have fewer strings involved than shares, however, since the organization's relationship ties with bondholders are completely severed at the end of the repayment period. According to Balduzzi, (2014), a bond is a debt instrument or a loan in which the terms, pay-back date and interest rates are detailed in a legal document. In finance, a bond is a debt security, in which the certified issuer be in debt of the holders a debt and is indebted to pay interest and repay the principal afterwards (Felicien, 2015). Comparing the features and benefits of bonds versus other common methods of raising cash provides some insight into why companies often look to bond issuance when they need to raise cash to fund corporate activities. Around the globe, the mutual fund industry has seen strong growth in assets in the past two decades. The number of mutual funds worldwide increased from 69,492 in 2010 to 79,669 in 2014 while global assets in mutual funds increased from \$4.0 trillion in 1993 to \$33.4 trillion in September 2014, reflecting increases in each of four broad regions: the United States, Europe, Asia-Pacific, and the rest of the world (ICI, 2015). According to the Investment Company Fact Book 2014, Portfolio diversification has increased the financial performance of US mutual fund with \$15 trillion in assets under management at year end 2013- accounting for half of the \$30 trillion mutual funds worth worldwide.

In China mutual funds have diversified Investment into various forms with majority of them diversifying into stocks. This has contributed immensely to the financial performance of mutual funds. According to the Company Institute Global's statistical analysis suggests that China's long-term mutual fund assets could reach \$11.8 trillion China by 2050. This assumes that China has no defined contribution plan system allowing participants to invest in mutual funds. If, to the contrary, China develops a pension plan system that allows contributions to be invested in mutual funds, its mutual fund asset could be even larger by 2050, perhaps \$15 trillion (Keohane, 2011). Chinese mutual funds have four dimensions of diversification as loans, deposits, assets, geography and established that they are associated with reduced profits and high costs in financial institutions.

In Nigeria, development of mutual funds has been slow but a growing number of new funds have been springing up since the past few years. There are 21 mutual funds presently quoted in the Nigerian Stock Exchange while a number of others are not quoted. A good number of new funds are also in various floatation and setting up processes. The Nigerian mutual funds market remains underdeveloped. For instance, according to the SEC (2013) there were only 202,059 unit holders in 2012, while the funds had a Net Asset Value (NAV) of ₦104.85 billion. The SEC (2014) also indicates that, as of June 2014, there were 38 fund managers in the country with just six of those accounting for 75% of the funds under management. As of December 2015, the Nigerian Stock Exchange (NSE) report put the NAV of the funds trading on the NSE at ₦259.72 billion (\$1.039 billion) with a market capitalization of ₦263.82 billion (\$1.055 billion) (Oduwole, 2015)

In Kenya the term Unit trusts and collective investment schemes are interchangeably used to refer to mutual funds. The Fund management industry is a key sector that invests funds under their control for both the private and public sectors in Kenya. The fund management industry in Kenya is relatively young having taken off with the passage of the Capital Markets Amendment ACT (2015), which promotes, regulates and facilitates the development of an of an orderly, fair and efficient Capital Markets. In Kenya, the mutual fund industry did not take off as early as in developed countries. However, unit trusts have largely grown in acceptance and popularity over the recent years and this is evidenced by the number of approved trust funds from virtually zero in 2001 to eleven in 2008. According to the Capital Market Authority (CMA) Investor Education handbook (2010), there were eleven functional unit trust schemes, namely; African Alliance Kenya Unit Trust Scheme, Old Mutual Unit Trust Scheme, British American Unit Trust Scheme, Stanbic Unit Trust Scheme, Commercial Bank of Africa Unit Trust Scheme, Zimele Unit Trust Scheme, Suntra Unit Trust Scheme, Insurance Companies of East Africa (ICEA) Unit Trust Scheme, CFC Unit Trust Scheme, Dyer and Blair Unit Trust Scheme and Standard Unit Trust Scheme.

## 1.2 Statement of the Problem

Diversification of the investment assets forms a critical component of a fund manager's strategy in their endeavor to improve the performance. Generally, there is a positive relationship between the number of assets held by a fund manager in an investment portfolio and the portfolio return since as the number of assets increase, the portfolio risk reduces which in the long-run improve the fortunes of an investor. Despite their late entry in the market, mutual funds have experienced turbulent market conditions, market deregulation, stiff

competition, technological advancements and reduced trade barriers thereby necessitating product diversification. As such, many mutual funds have resorted to diversifying their portfolios in order to stay afloat and maintain or enhance their profitability. According to Capital Market Authority (2016) more than 60 percent of funds did meet their financial performance targets. The continued poor performance of mutual funds has resulted to lack of interest and confidence of investors, inefficiency in mutual funds management and imbalanced investment of available funds. A number of studies have been done in Kenya on fund management firms. Muriithi (2015) carried out an evaluation of risk and returns of equity mutual funds in Kenya. Ngene (2012) carried out an investigation into the portfolio performance measures used by pension funds managers and the challenges they face in portfolio management in Kenya. Although a number of limited studies have been done very little studies have been conducted on diversification in the mutual funds sector. This study therefore sought to determine the influence of portfolio diversification on financial performance of mutual funds in Nakuru County, Kenya.

### 1.3 Purpose of the Study

The purpose of the study was to determine the influence of portfolio diversification on financial performance of mutual funds in Nakuru County, Kenya.

#### 1.3.1 Specific Objectives

- i. To assess the influence of diversification in bonds and financial performance of mutual funds in Nakuru County, Kenya.
- ii. To determine the influence of diversification in shares and financial performance of mutual funds in Nakuru County, Kenya

#### 1.4 Research Hypothesis

**H<sub>01</sub>** : Portfolio diversification in bonds has no significant influence on financial performance of mutual funds in Nakuru County, Kenya.

**H<sub>02</sub>** : Portfolio diversification in shares has no significant influence on financial performance of mutual funds in Nakuru County, Kenya

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

The study adopted theory of modern portfolio theory and arbitrage pricing theory

#### 2.1.1 Modern Portfolio Theory

The theory was propounded by Markowitz in 1959. The theory is basically grounded on the idea that risk-averse traders can assemble a combination of assets such as the portfolios so as to enhance or snowball expected return in a given phase of market related hazard, underlining such perils is an intrinsic component of higher returns (Bodie, 2005). MPT assumes that investors are rational and that the markets are efficient. Effect of portfolio composition along green frontier is decided by way of the level of hazard taken via the buyers and returns collected out of the portfolio mix depending on market overall performance. With regards to portfolio diversifications, the MPT aids mutual funds in describing investment options in terms of the inherent risks and expected returns, determining the allocation of resources among classes of investments, reconciling risks and returns and measuring performance

#### 2.1.2 Arbitrage Pricing Theory

Arbitrage Pricing Theory (APT) was advanced by Ross in 1976. According to APT, the return is likely to be obtained from a financial asset depends highly on its beta. APT assumes that there the expected returns from an asset are positively associated with and their covariance with other random variables. According to APT, a high correlation between the return rate from a particular portfolio and an asset can imply that worthwhile to claim risk premium that is high of such asset (Sciubba, 2016). Arbitrage Pricing Theory advocates for diversification as an investment strategy to firms which can lead to increased returns. Arbitrage Pricing Theory, however points out that diversification are related to risk hence need to ensure that diversification of assets with critical evaluation. Arbitrage Pricing Theory (APT) is applicable in this study backs up the link between asset diversification and the financial performance of mutual funds.

## 2.2 Conceptual Framework

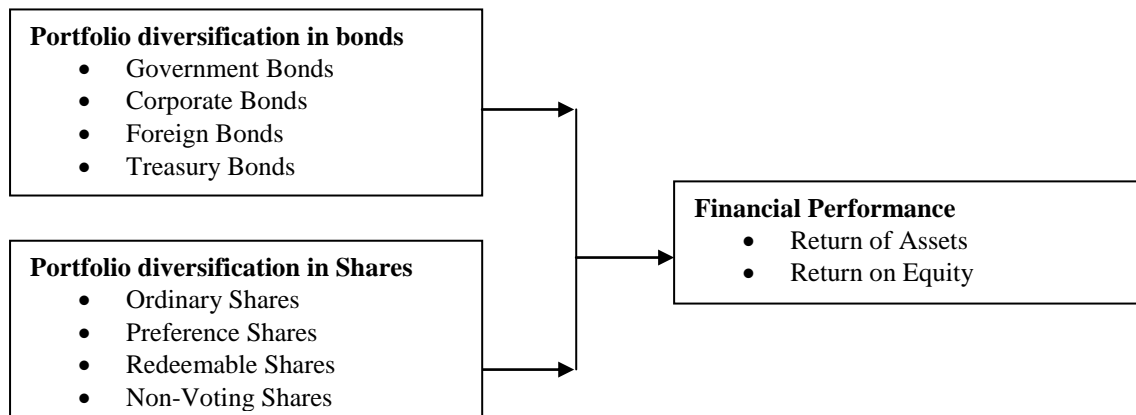


Figure 1: Conceptual Framework

## 2.4 Review of Literature Variables

## 2.4.1 Bonds Diversification and Financial Performance of Mutual Funds

Ngabirano (2016) sought to establish the internal determinants of corporate bonds performance of financial institutions listed in Nairobi securities exchange in Kenya. The study was guided by the following research objectives; to determine the internal determinants of corporate bond performance, to establish the external determinants of corporate bond performance and to examine the ways in which to enhance performance of corporate bonds in Kenya. A causal research design was applied to a population of 18 corporate issues listed on the Nairobi Securities Exchange (NSE), his study targeted 18 corporate issues listed on the NSE fixed income segment. The study found that all the internal determinants had a negative insignificant relationship with bond performance except the bond issue size and the coupon which had a beta coefficient that was positive. The study also found that all the external determinants had a positive insignificant relationship with bond performance except the interest rates, exchange rates and inflation rates size which had a beta coefficient that was negative. The study was general on financial institutions Listed in Nairobi Stock Exchange. This study will only focus on mutual funds.

Ratemo (2015) conducted a study on the relationship between bond prices and company performance for firms that engage in sustainability reporting in Nairobi Kenya. The target population consisted of 12 companies listed on Nairobi Securities exchange during the period of year 2012-2014. The secondary data was collected from Nairobi securities exchange and used Statistical Package for Social Sciences (SPSS) to analyze. The findings were that the coefficient of variable demonstrates that the shares prices have positive association to Return on Assets (ROA). Hence, the result of this research shows that the bond prices of firms that engage in sustainability reporting does influence a company's performance. The dependent variable of the study was sustainability reporting this study focused on organization financial performance.

Chemutai, Ayuma and Kibet (2016) conducted a research on the effects of bond on the share-price performance on banks Listed on the Nairobi Security Exchange in Kenya. The study was guided by the following objectives; to find out the effect of debt on share price performance in banks listed in the Nairobi Security Exchange, to establish the effects of equity on share price performance in banks listed in the Nairobi Security Exchange. The study employed a descriptive research design. The target population comprised of the eleven cross listed banks in Kenya Nairobi Security Exchange. The branch managers and operations managers were selected to participate in the study using purposive sampling. The study findings indicated that there was a significant relationship between all the study variables, debt, equity, bond and retained earnings on share price performance. The study was conducted in both financial and non-financial institutions. This study focused only on mutual funds institutions.

Mbugua (2013) sought to examine factors that influence the development of the corporate bonds market in Kenya. The study adopted a time series analysis research design with regression model. The study had a target population of Kenyan government bonds that have been in trade from year 1985 -2015. This study adopted regression analysis in order to answer the research questions. Data was analysed using SPSS. The findings indicated that corporate bonds have high yields since interest payments were taxable. The study only used secondary data. This study will use both secondary and primary data which will help in assessing the current factors that influence the development of the corporate bonds market in Kenya.

### 2.4.3 Diversification in Shares and Financial Performance of Mutual Funds

Umar & Liliopsid, (2013) conducted a study to examine the connection between shares costs and firm EPS from 2005 to 2009 in Nigeria. The study employed a straight forward linear regression model on a panel of a hundred and forty Nigerian corporations from a complete population of 216 firms 'operated in Nigerian securities market (NSE), the findings revealed that firm EPS has no prophetic power on shares costs and will not be relied upon for the prediction of the behavior of shares costs in African nation. The study was conducted in a different country hence the findings might not be applicable in the Kenyan context. Oludoyi, (2013) examined the risk characteristics of the firms quoted on Nigerian shares market. The population of interest in this study consisted of firms quoted on Nigerian shares market. A sample of 40 operational firms in Nigeria was studied. Secondary data was collected using data collection sheets as the main data collection tool and interview schedule as the primary data. Data collection sheets were used to collect data guided by the objectives of the study. He concluded that the covariance of the firms 'with market portfolio is positive and that the returns on the firms 'shares tend to move in the same direction with return on the market portfolio. This implies that majority of firms in a portfolio with a positive beta have restricted scope for portfolio diversification. The study was general on the type of target population. This study focused on financial institutions (mutual funds)

Gitari (2010) sought to establish shares risk on financial performance of Kenyan Publicly quoted companies. The study adopted a three factor model to establish the relationship between various variables. The study adopted panel regression, in order to achieve the purpose of the study. The findings indicated that it was apparent that Kenyan Publicly quoted companies exhibit systematic risk that is positively related to return. This relationship was not statistically significant thereby suggesting that investors may either be under or overcompensated for taking high risks. The results also indicated a negative but statistically insignificant association between unsystematic risk and return. He also found that the nature of risk-return relationship was independent of the nature of the industry in which a company operates reinforcing the conclusion on the relationship between unsystematic risk and returns. The study was not specific on the type of targeted publicly quoted companies. This study only focused on mutual funds

Goriaev (2014) sought to establish risk factors in the Russian shares market. The study relied on secondary data of Russian Shares Market. He found out that the difference in return between the companies susceptible to the country risk and those with stable profit in any macro-economic environment is about 59% premium. The corporate governance aspect also accounted for 25% risk premium, and the size and dollar factor accounted for premium of between 33% to 39% per annum in the Russian market. However the study was conducted in a developed nation therefore the findings might not be applicable in a developing nation such as Kenya. Menggen (2017), focused on the risk return tradeoff in Chinese market, sampled the daily, weekly and monthly market return observations, using GARCH – M model, his findings were that the risk- return relationship in Shanghai shares market was quite different from Shenghen market. He found the risk-return relationship was positive and statistically significant for the daily returns in Shenghen Shares market, while in Shanghai market there was a negative and insignificant relationship. The study was also conducted in a different country and hence the policies governing mutual funds might be different from those of Kenya.

### 2.4 Empirical Review

Buster (2016) studied the relationship between asset allocation and financial performance of mutual funds in Kenya. The population of study consisted of all approved Collective Investment Schemes in Kenya that deal with Mutual funds and invest in equities. The study found out that there was a difference between the performance of unit trusts and the market. The findings also showed that in most of the instances, the market trailed behind the performance of unit trusts. Kamwaro (2013) sought to determine the impact of investment portfolio choice on financial performance of investment companies. The study took a causal research design approach and study entailed a census of all the investment companies operating in Kenya and listed in the Nairobi Securities Exchange. There were four investment companies listed in Nairobi Securities Exchange during the period of study between the years 2007 to year 2011. Secondary data sources available at the companies' books of account and the NSE or Capital Market Authority offices was used. The study used the multiple linear regression equation and the method of estimation was Ordinary Least Squares (OLS) so as to establish the impact of investment portfolio choice on profitability of investment companies. The study revealed that investment portfolio choice affects the financial performance of investment companies listed in the Nairobi Securities Exchange. The study found that investment in bonds positively influences the financial performance of investment companies listed in the NSE. The study also found that investment in real estate and equity by investment companies positively impacted in the financial performance, it was found that size of the company positively impacted in the financial performance of investment companies. There is need for the management of investment companies to have solid organization structure, organization structure will influence their investment portfolio choice which impact on their financial performance.

### 2.5 Critique of the Existing Literature

According to a study by Chemutai, Ayuma and Kibet (2016) on the effects of bond on the share-price performance among banks Listed on the Nairobi Security Exchange in Kenya. The study found out that there is a significant relationship between debt, equity, bond and retained earnings on share price performance. However the study was conducted in both financial and non-financial institutions. This study focused only on mutual funds institutions. According to a study by Waweru (2013) on the effect of diversification in insurance on the financial performance of commercial banks in Kenya. The study used a descriptive design. The study found out that there was a positive relationship between annual interest on loan advances and financial performance of commercial banks in Kenya. The study further revealed there was a negative relationship between annual inflation rate and financial performance of commercial banks in Kenya, thus the study concludes that annual inflation rate negatively affects the financial performance of commercial banks in Kenya. However the study relied on secondary data only, this study will focus on both primary and secondary data

A study by Gitari (2010) on the effect of shares risk on financial performance of Kenyan Publicly quoted companies, the findings established that Kenyan Publicly quoted companies' exhibit systematic risk that is positively related to return. This relationship was not statistically significant thereby suggesting that investors may either be under or overcompensated for taking high risks. The findings further that the nature of risk-return relationship was independent of the nature of the industry in which a company operates reinforcing the conclusion on the relationship between unsystematic risk and returns. The study was not specific on the type of targeted publicly quoted companies. This study focused on mutual funds

### 2.6 Summary of Reviewed Literature

This chapter presented the theories which educate on portfolio diversification and financial performance of mutual funds. Modern Portfolio Theory and Arbitrage Pricing Theory. They offer powerful and intuitively pleasing predictions on how investors can enhance their portfolio performance through ensuring that their investments are allocated into different categories of industrial sectors and financial securities that are not expected to react similarly. Modern Portfolio Theory attempts to maximize portfolio expected return for a given level of portfolio risk or equivalently minimize risk for a given level of expected return, by carefully choosing proportions of various assets. This implies that for the mutual funds, combining different investment options whose returns are not perfectly positively correlated, MPT seeks to reduce the total variance of the portfolio return while assuming that investors are rational and markets are efficient. Arbitrage Pricing Theory advocates for diversification as an investment strategy to firms which can lead to increased returns. All these theories are under the umbrella of portfolio diversification and hence applicable in explaining the influence of portfolio diversification and financial performance.

## III. RESEARCH METHODOLOGY

The study adopted the descriptive research design. The descriptive research design describes the present status of a phenomenon, determining the nature of prevailing conditions, practices, attitudes and seeks accurate descriptions (Mugenda, 2013). The descriptive study describes the phenomenon as it is on the ground without any manipulation of variables.

### 3.1 Target Population

The target population refers to an entire group of individuals, events or objects that have a common observable characteristic or the total collection of elements that the researcher wishes to make some inferences (Mugenda, 2013). The unit of observation was 10 listed mutual funds in Nakuru Town while the unit of analysis was 10 branch managers, 25 finance officers, 21 pension officers, 28 business development manager and 10 operations officers, therefore the total population of the study was 94 respondents.

### 3.2 Sampling Frame

The study sampling frame was employees working in mutual funds in Nakuru; they included branch managers, finance officers, pension officers, business development manager and operations officers.

#### 3.2.1 Sampling Technique

Sampling technique is the process of selecting a sample size. Nassiuma's (2000) formula was used to get a sample size of 51 employees as indicated below.

$$n = \frac{NC^2}{C^2 + (N-1)e^2} \dots\dots\dots \text{Equation 3.1}$$

Where

n = Represents sample size,  
 N = Represents study population  
 C = Represents coefficient of variation ( $21\% \leq C \leq 30\%$ ), and  
 e = Represents error margin ( $2\% \leq e \leq 5\%$ ).

Calculating the sample size,

$$n = \frac{94 (0.21)^2}{0.21^2 + (94-1)0.02^2}$$

$$n = 50.9$$

$$n = 51$$

Stratified random sampling was also used to get the sample size of employees from each mutual firm. The formula was appropriate because there was equal probability of selecting each unit from the population being studied.

**Table 1: Sample Size**

Name	Total	Sample Size
CIC Unit Trust Scheme	9	5
Old Mutual Unit Trust Scheme	11	6
ICEA Unit Trust Scheme	9	5
Madison Assets Unit Trust Funds	9	5
British-American Unit Trust Scheme	12	6
UAP Investment Collective Investment Scheme	11	6
Stanlin (Stanbick Unit Trust Scheme )	9	5
Pan Africa Unit Trust Scheme	9	5
African Alliance Kenya Unit Trust Scheme	7	4
Commercial Bank of Africa Unit Trust Scheme	8	4
<b>Total</b>	<b>94</b>	<b>51</b>

### 3.2 Data Collection Instruments and Procedure

The study made use of both primary and secondary data. Primary data was collected using self-administered semi-structured questionnaires. The questionnaire is a fast way of obtaining data as compared to other instruments. The questionnaires contained structured questions. The structured questions were employed in an effort to conserve time and money and to facilitate an easier analysis as they are in immediate usable form (Kothari, 2014). Secondary data was collected from annual financial reports of the mutual funds in the last three financial years. The pilot study was carried across mutual funds in Nairobi. The choice of Nairobi City is to ensure that the participants in the pilot study were excluded from the main study.

Table 2 : Reliability Statistics Results

Variable	Number of Items	Cronbach's Alpha
Diversification in bonds	5	0.843
Diversification in shares	6	0.823
Financial performance of mutual funds	5	0.798

### 3.3 Data Analysis and Presentation

Both descriptive and inferential statistics was employed in the study. Descriptive statistics involved the use of percentages, frequencies, measures of central tendencies (mean) and measures of dispersion (standard deviation). On the other hand, inferential statistics was analyzed in form of Pearson's correlation and multiple regression analysis.

The results of the analysis were presented in form of statistical Tables, charts and graphs.

The following regression guided the study;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where:

Y represents Financial Performance

- $\beta_0$  represents Constant Term
- $X_1$  represents Diversification in Bonds
- $X_2$  represents Diversification in Shares
- $\varepsilon$  represents Error Term

$\beta_1, \beta_2$ , represents Régression Coefficients for Independent Variables.

#### IV. FINDINGS AND DISCUSSIONS

##### 4.1 Response Rate

The study had a sample size of 51 respondents. Out of 51 respondents, 50 responses were obtained giving a response rate of 98%.

**Table 3: Response Rate**

Target No. of respondents	No. of Questionnaires Returned	Response Rate (%)
51	50	98

##### 4.2 Demographic Information

**Table 4: Duration of Service**

Years	Frequency	Percentage
Less than 1 Years	12	24%
1-5 Years	31	62%
6-10 Years	7	14%
More than 10 Years	0	0%
<b>Total</b>	<b>50</b>	<b>100</b>

According to the findings, 12(24%) of the respondents indicated that they have been working with mutual fund organizations for less than 1 years, 31(62%) stated they had been working with mutual fund organizations for 1-5 years while 7(14%) stated they had been working with mutual fund organizations for 6-10 years. This shows that majority of the respondents have been working with mutual fund for 1-5 years

##### 4.3 Descriptive Findings and Discussions

###### 4.3.1 Diversification in Bonds and Financial Performance of Mutual funds

**Table 5: Influence of Diversification in Bonds and Financial Performance of Mutual Funds**

Diversification in bonds	SA	A	N	D	SD	Mean	Std.
	(%)	(%)	(%)	(%)	(%)		
Government bonds are mostly applicable when the firm want to make huge investment	58	24	8	4	6	4.177	0.912
Corporate bonds are mostly preferred since they provide long-term working capital.	40	48	4	8	0	3.984	1.032
Foreign bonds are mostly preferred since they don't dilute the value of existing shareholdings	50	34	8	4	4	4.145	0.921
Regular interest payments of treasury bond holders can negatively affect	54	36	2	5	3	4.563	.608



financial performance when the company is making losses

There is the potential of the company' share value to be reduced if the profits decline since bond interest payments take precedence over dividend

48	40	3	5	4	4.181	.513
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From the findings 58% of the respondents strongly agreed that government bonds are mostly applicable when the firm want to make huge investment, 24% agreed 8% of the respondent were neutral 4% disagreed while 6% strongly disagreed (mean=4.177, SD=0.912). Issuance of government bond is used in many instances of financial crises to finance financial institutions such as mutual funds. From the finding 40% of the respondents strongly agreed that corporate bonds are mostly preferred since they provide long-term working capital, 48% agreed, 4% were neutral while 8% disagreed (mean=3.984, SD=1.032). The finding agree with a study by Ngabirano (2016) who found that corporate bond have a significant effect on the financial performance of financial institutions. On the same note, 50% of the respondents strongly agreed that foreign bonds are mostly preferred since they don't dilute the value of existing shareholdings, 34% agreed 8% were neutral 4% disagreed while 4% strongly disagreed (mean=4.145, SD=0.921). The study sought to find out whether regular interest payments of Treasury bond holders can negatively affect financial performance when the company is making losses.

From the findings 54% of the respondents strongly agreed, 36% agreed, 2% were neutral, 5% did not agree while 3% strongly disagreed (mean=4.563, SD=0.608). Moreover, 48% of the respondents agreed that there is the potential of the company' share value to be reduced if the profits decline since bond interest payments take precedence over dividend, 40% agreed, 3% were neutral 5% did not agree while 4% strongly agree (mean=4.181, SD=0.513). The findings are congruent to those of Ratemo (2015) who found out shares prices have positive association to Return on Assets (ROA). Bond prices of firms that engage in sustainability reporting does influence a company's performance. According to Mbugua (2013) study which concluded that corporate bonds have high yields since interest payments are taxable. This implies that diversification in bonds influences financial performance of mutual funds.

#### 4.3.2 Diversification in Shares and Financial Performance of Mutual funds

**Table 6: Influence of Diversification in Shares and Financial Performance of Mutual Funds**

Diversification in shares	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std. Deviation
Ordinary shares are considered as the easiest way of raising huge amount of money	64	29	2	5	0	4.403	0.778
Rise in market price of the ordinary share negatively affect the organization financial performance	54	30	8	5	3	4.307	0.738
Preference shareholders with negative interest can hurt the financial performance of an organization	38	38	4	11	9	4.145	0.807
In most cases the high number of redeemable shares negatively affect the financial performance of organization	43	34	7	5	11	4.387	0.869
Low rate of dividend can be associated to poor financial performance of a company which negatively affect the financial performance of the company	60	32	5	3	0	4.48	.731
High number of non-voting shares negatively affects the financial performance of the	58	32	10	0	0	4.44	.729

organization.

From the findings 64% of the respondents strongly agreed that ordinary shares are considered as the easiest way of raising huge amount of money, 29% agreed, 2% were neutral while 5% disagree (mean=4.403, SD=0.778). In addition 54% of the respondents strongly agreed that rise in market price of the ordinary share negatively affect the organization financial performance, 30% agreed, 8% were neutral, 5% disagree 3% strongly disagree (mean=4.307, SD=0.738). Furthermore 38% of the respondents strongly agreed that preference shareholders with negative interest can hurt the financial performance of an organization, 38% agreed, 30% disagree, 4% were neutral, 11% disagree 9% strongly disagree (mean=4.145, SD=0.807). On the same note 43% of the respondents strongly agreed that in most cases the high number of redeemable shares negatively affect the financial performance of organization, 34% agreed, 7% were neutral, 5% disagree while 11% strongly disagree (mean=4.387, SD=0.869). Furthermore 60% of the respondents strongly agreed that low rate of dividend can be associated to poor financial performance of a company which negatively affect the financial performance of the company, 32% agreed, 5% were neutral, while 3% of the respondents disagree.

Finally 58% of the respondents strongly agreed that high number of non-voting shares negatively affects the financial performance of the organization, 32% agreed while 10% were undecided (mean=4.44, SD=0.729). Shares markets promote savings and investments by providing an avenue for portfolio diversification to each individual and company investors and conjointly fuel economic process through diversification, mobilizing and pooling of savings from completely different parties and availing them to banks and alternative corporations for best utilization (Kimani & Mutuku, 2013). This implies that diversification in shares influences the financial performance of mutual funds.

#### 4.3.3 Mutual Funds ROA

**Table 7: Mutual Funds ROA from 2015 to 2016**

	2015	2016	2017
Mean	0.0497	0.0466	0.0476
Median	0.0479	0.0485	0.0490
Standard Deviation	0.0148	0.0188	0.0163
Range	0.0430	0.0570	0.0580
Minimum	0.0290	0.0170	0.0190
Maximum	0.0720	0.0740	0.0770

From the findings, it can be noted that the year 2015 recorded the highest value for the ROA as shown by a mean of value of 0.0497 while the year 2016 recorded the lowest value for the ROA as shown by a mean value of 0.0466. In addition, the values for standard deviation depict variability in the ROA during the three year period with the highest deviation of 0.0188 in the year 2016 and the lowest 0.0148 in the year 2015. The findings revealed that there has been a significant decrease in ROA during the three-year period.

#### 4.4 Inferential Statistics

The researcher undertook correlation analysis to establish the nature and strength of the relationships between the independent and the dependent variables of the study

##### 4.4.1 Correlation between Diversification in Bonds and Financial Performance of Mutual Funds

**Table 7 : Correlation between Diversification in Bonds and Financial Performance of Mutual Funds**

		Diversification In Bonds
Financial Performance Of Mutual Funds	Pearson Correlation	.641*
	Sig. (2-tailed)	.014
	N	50

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

The study established that there exists a strong positive and significant relationship ( $r = .641$ ,  $P=0.014$ ) between diversification in bonds and financial performance of mutual funds. This is supported by the P-value of 0.014 which is less than correlation of 0.05. The study agrees with Ngabirano (2016) who found out that

corporate bonds had a positive significant relationship with organization performance. The study also agrees with Mbugua (2013) who found out that corporate bonds have high yields since interest payments were taxable. This implies that diversification in bonds plays a big role in the in the performance of the mutual funds.

#### 4.4.2 Correlation between Diversification in Shares and Financial Performance of Mutual Funds

**Table 8 : Correlation between Diversification in Shares and Financial Performance of Mutual Funds**

		Diversification in shares
Financial performance of mutual funds	Pearson Correlation	.597*
	Sig. (2-tailed)	.018
	N	50

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

The correlation coefficient ( $r=0.597$ ,  $P=0.018$ ) indicates that there exists a strong, positive and significant relationship between diversification in shares and financial performance of the mutual funds. This is supported by the P-value of 0.018 which is less than correlation of 0.05. This implies that diversification in shares plays a big role in the in the performance of the mutual funds. .

#### 4.5 Regression Analysis

**Table 9: Regression Analysis**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.038	.145		.260	.796
Diversification in bonds	.596	.107	.548	5.570	.013
Diversification in shares	.245	.104	.179	2.356	.022

Dependent Variable: Financial performance of the mutual funds.

The equation below illustrates the findings of the multiple regression coefficients

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

The findings indicated that all the predictor variables in the study have a positive relationship with financial performance of the mutual funds. Thus,

$$Y = 0.038 + 0.596X_1 + 0.245X_2$$

The results also illustrate that, a unit change in diversification of bonds would result to 0.596 times change in financial performance of the mutual funds while a unit increase in diversification in shares would result to 0.245 times increase in financial performance of mutual funds .

#### 4.6 Hypothesis Testing

The study sought to test the hypothesis that:  $H_{01}$ : diversification in bonds has no significant influence on financial performance of mutual funds in Nakuru County, Kenya. From the findings the p-value was 0.013 which was less the 0.05 significant level. Therefore, based on the rule of significance, the study rejects the null hypothesis ( $H_{01}$ ) and concluded that diversification in bonds has a significant influence on financial performance of mutual funds in Nakuru County, Kenya. The study sought to test the hypothesis that:  $H_{02}$ : diversification in shares has no significant influence on financial performance of mutual funds in Nakuru County, Kenya. From the findings the p-value was 0.022 which was less the 0.05 significant levels. Therefore, based on the rule of significance, the study rejects the null hypothesis ( $H_{02}$ ) and concluded that diversification in shares has a significant influence on the financial performance of mutual funds in Nakuru County, Kenya.

### V. CONCLUSIONS

From the findings the researcher concluded that government bonds are mostly applicable when the firm wants to make huge investment. The findings indicated that there exists a strong positive and significant relationship between portfolio diversification in bonds and financial performance of mutual funds. The study concluded that

ordinary shares are considered as the easiest way of raising huge amount of money. The study also noted that there existed a positive, moderate statistically significant relationship between diversification in shares and financial performance of mutual funds.

## VI. RECOMMENDATION

Mutual fund managers should adopt diversification policies to mitigate economic changes in different industries. Investing in different industries that are negatively correlated eliminates systematic risk. The inflation rate is less felt in some industries than others hence a diversified portfolio will achieve better returns than undiversified ones. A large fund size enjoys economies of scale and broader diversification options. This study found that bigger funds earned higher returns than small ones. Effective marketing strategies should be adopted to attract more investors and merging of smaller funds. In light of the research findings, the study established a positive relationship between investment style and fund performance.

### 5.3 Suggestions for Further Research

The study recommends that further study should be conducted to find out the effect of government policies on financial performance of mutual funds. In addition further study should be conducted to determine the effect of other form of diversification on financial performance of mutual funds.

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