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Fund-Specific Factors and Financial Performance of Mutual Funds in Kenya

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Abstract: The study sought to evaluate the effect of fund specific factors on financial performance of mutual funds in Kenya. Specifically, the study sought to determine the effect of size, age, diversification and management efficiency of the fund on the financial performance of mutual funds in Kenya. The data collected was analysed using both descriptive and inferential statistical techniques. The study was based on panel data regression models given the data had cross sectional and time series aspects. The study eventually adopted Panel Correlated Standard Errors model to eliminate the serial correlation and group heteroskedasticity. The study established that the overall p-value associated with F-statistic was lower than 0.05 hence it was concluded that fund specific factors and other covariates had a significant effect on financial performance of mutual funds in Kenya. Regarding specific individual variables, the study revealed that the effect of fund size on financial performance of mutual funds was major and direct. Fund age directly but not significantly explained financial performance of mutual funds in Kenya. The regression also revealed that fund diversification had a direct and significant effect on financial performance of mutual funds. Finally, the effect of fund management efficiency on financial performance of mutual funds was inverse and major. The study makes recommendations based on study findings and conclusions. First, the study recommends to fund managers to increase the size of funds through aggressively marketing their funds to the general public to attract additional funding. Second, the research recommends to fund managers to continue diversifying the specific funds under their management in line with respective laws by spreading the pooled funds over a number of financial assets including shares, government securities, deposits in financial institutions, commercial papers among other assets. Third, the study suggests to fund managers to improve their efficiency. The fund managers should eliminate any wastages and ineffectiveness that may results to increased management cost of the fund.

Key Words: *mutual funds, Unit trusts, financial performance, age of the fund, management efficiency, size of the fund.*

I. INTRODUCTION

From a traditional perspective, investing in shares yields unsurpassed returns, offering investors the chance to enhance their wealth (Pagdin & Hardy, 2018). On the contrary, the large capital outlay is required to invest in shares that earn significant amounts of returns is often too high for small investors. Ramesh (2018) provides that these investors are also highly rational and prefer investments with the lowest risk.

Investment firms have thus, come up with the strategy of pooling investors' funds to develop collective investment schemes. The strategy of pooling investor's funds is referred to Unit Trust (UT) or Mutual Fund (MF). Mutual Fund is a type of investment vehicle that allows small scale investors with similar investment goals to pool funds from their saving that is in turn invested in other financial assets like traded common stock, treasury instruments among others and is managed by professionals.

Through this strategy, small investors can find cost-effective access to shares and money market securities like bonds and bills. Furthermore, the collective funds scheme will enable the investors to invest together in different money market instruments (Ben Rejeb & Arfaoui, 2019). Pooling enables small investors to enjoy reduced transactional costs in

the processes of buying and selling their securities. It also gives them better negotiating capabilities for better returns relative to the ones they would make if they engaged in the transactions individually.

Empirical literature identifies several mutual funds' performance determinants broadly categorised into fund specific, industry and macroeconomic factors. The present study focused on fund specific factors category including size of the fund, age of the fund, and diversification of the fund and management efficiency of the fund. Fund size has been noted in the literature to be influencing performance of mutual funds. Lou (2012) revealed that financial performance of mutual funds is determined by size of the invested fund. Large funds can benefit from the advantages of economies of scale especially the management cost that remains relatively constant even as the size of the fund rises as more investors pool in more resources (Mentel & Horváthová, 2016).

Asset's age is one more basic component affecting the monetary execution of unit trusts. The exhibition of common assets frequently improves with reserve age given the combined insight of assets directors in resources determination and market timing (Açıkgöz, Uygurtürk and Korkmaz, 2015). Be that as it may, in specific cases, the monetary presentation of shared reserves has would in general downfall with age particularly when the assets turn out to be excessively mind boggling and there is a leeway on the administration part.

Fund diversification is the extent to which the portfolio has a variety of individual assets such that assets specific risks are spread over the portfolio (Pellinen, et al. 2015). Diversification is critical in spreading assets specific risks. Unit trust funds are associated with a variety of risks that the fund managers have to mitigate or control to protect the investments. One of such risk is the market risk that entails the risk that the fund's trading prices are affected by changes in the value of the separate assets in the fund, which in turn are affected by fluctuations in the market conditions, for instance in terms of political and economic changes (Mohammed Kamil et al., 2018). Market risk is inevitable, especially given that the market conditions are usually dynamic, which is also true in the contemporary global market.

Management efficiency describes the skill of the fund managers in running the fund at lowest possible cost. The cost of fund management is often used as the proxy for fund management efficiency. The cost of funds management is often measured using expense ratio. Maina (2013) explained that expense ratio is the proportion of the total value of funds at the end of a period that was used as running expenses by the management of the fund for instance market research, consultancy, brokerage fees and administration fees. Grinblatt and Titman (1992) explained that unit trust funds should generate adequate returns to pay management fees and earn return to investors.

II. Statement of the Problem

The pooling of investors' funds to make collective investment schemes in the form of mutual funds is an investment vehicle that offers small scale investors an opportunity to invest their savings into a professionally managed fund that is invested into assets such as shares, bonds, and money market instruments. It leads to reduced transactional costs of purchasing and offloading of financial assets and gives the individual investors the capability to negotiate better terms as compared to the ones they would get if they invested individually (Namu et al., 2021). Despite the crucial role of unit trust funds in financial deepening, their development and returns in African financial markets, particularly in Kenya, have lagged behind other areas of investment vehicles. The advancement of unit trust supports has been limited by risk went against nature of most resource chiefs (Mokaya et al., 2020). The financial backers will overall go for low assets like depository bond and depository charges that are seen as hazard free assets. The mass piece of unit trust reserves is put into securities exchange, depository bills and securities and store authentications that obtain modestly lower returns. This chance opposed conduct has would in general restrict the development and profit created in common assets (Cytonn, 2019). The yearly typical development of unit trust supports in Kenya has been around 1.9 billion Kenyan shillings with mean development throughout the previous 9 years being 17.6 billion Kenyan shillings which addresses a development 11.1% which is a much lower rate contrasted with the global average of 40% for most unit confides in universally inside a similar period (Cytonn, 2021).The theoretical and empirical literature on returns of unit trust funds has identified fund-specific characteristics as key in explaining returns of unit trust funds. Mohammed Kamil et al. (2018) examined factors influencing unit trust performance in Malaysia with the results revealing small finds performed relatively lower than large fund even though the difference in performance was not significant. Khinchi and Kanodia (2020) revealed that funds size, inflating, fund's manager's competence in choosing securities and market timing has a major direct effect on financial performance of equity mutual fund performance. Namu et al. (2021) revealed that fund age, size and transaction costs had a major effect on mutual fund returns. Khinchi and Kanodia (2020) on the determinants of mutual funds in Kenya revealed a direct effect of interest and coupon rate on returns to mutual funds.

Even though a lot of research on factors impacting mutual funds exist, the majority of them have been conducted in industrialized countries around the world. Furthermore, there are few studies in Kenya that focus on the impact of fund-specific characteristics on mutual fund financial performance. The study aimed to investigate the impact of fund-specific characteristics on the financial performance of mutual funds in Kenya given the slow expansion of unit trust funds in Kenya and literature shortages.

III. Objective of the Study

The general objective was to establish the effect of fund-specific characteristics on the financial performance of mutual funds in Kenya. Specific objectives of the study include;

i. To determine the effect of size of the fund on the financial performance of mutual funds in Kenya.

ii. To assess the effect of the age of the fund on financial performance of mutual funds in Kenya.

iii. To analyse the effect of diversification of the fund on financial performance of mutual funds in Kenya.

iv. To examine the effect of management efficiency of the fund on financial performance of mutual funds in Kenya.

Research Hypotheses

The study was guided by the following research hypothesis;

H_{01}: The fund size has no significant impact on financial performance of mutual funds in Kenya.
H_{02}: The age of the fund has no significant impact on the financial performance of mutual funds in Kenya.
H_{03}: The diversification of the fund has no significant impact on the financial performance of mutual funds in Kenya.
H_{04}: The management efficiency of the fund has no significant impact on the financial performance of mutual funds in Kenya.

IV. LITERATURE REVIEW

1. Theoretical Review

The study was mainly anchored by three theories. Firstly, the Asset Pricing Theory (APT) is founded on the idea that the performance of securities can be forecasted by referring to the causal effect link between the asset and the most probable risk factors in the market (O'Loughlin & O'Brien, 2019). It gives a prediction of the link between the returns of a single asset and that of a portfolio through the reflection given by a linear combination of multiple independent macroeconomic variables. APT is commonly considered to be an alternative to CAPM, especially because of its flexible assumption requirements. However, CAPM requires the use of mean market returns. On the other hand, APT applies the use of the mean returns of a risky asset as well as risk associated with multiple macroeconomic factors such as inflation and changes in interest rates (O'Loughlin & O'Brien, 2019). As a result, the theory provided light on some of the elements that drive portfolio performance. The theory explained how macroeconomic factors such as economic growth, inflation, and interest rates affect fund performance.

Secondly, Modern Portfolio Theory (MPT)theory provided that variances in the return rate make a significant proxy for portfolio risk given some assumptions based on the behaviour of the investors. Additionally, the theory argues that to choose profitable and beneficial investments, evaluating the relationship between return and risk is not adequate. As such, investors should consider the significance of the diversification of portfolios to reduce the overall portfolio risk (Obuya & Olweny, 2017). The main assumption of this theory is that investors have the willingness to get optimal returns on their invested funds given the risk level (Pagdin & Hardy, 2018). The present study is related to this theory because it entails the use of unit trust funds as a means of reducing the overall portfolio risk in investment. Subsequently, they should know how they can diversify effectively. Investors in unit trust funds consider investing in portfolios that will maximize their returns.

Thirdly, the study also borrowed heavily from Capital Asset Pricing Model (CAPM). The CAPM is used for establishing a rate of return that is required that is theoretically appropriate for an asset to support decision-making processes concerning the selection of assets to add to a diversified portfolio. The model was introduced Sharpe, Treynor, Mossin, and Lintner independently as they referred to the earlier work by Harry Markowitz on modern portfolio theory and diversification (Claessens, 2020). CAPM applies the idea that individual investments are faced with two main types of

risks, diversifiable and non-diversifiable. Non-diversifiable risk is kind of risk inherent in the market and cannot be spread via diversification of assets in the portfolio (Francis & Kim, 2013). As the market changes, each asset class is likely to be affected in its specific way. As long as an individual security participates or is involved in the variability of the market that entails the market risk (Amar & Kroll, 2016). Systematic risks include recessions, dynamic interest rates, and price wars in the market. The CAPM theory was relevant in informing effect of funds diversification on financial performance of mutual funds. An optimally diversified fund eliminates security specific risk such that the residual risk is the market risk hence improved financial performance. Less diversified funds are exposed to both security specific risk and market risk hence lower return.

2. Empirical Review

The impact of size of the fund on financial performance of mutual funds has attracted attention of scholars' overtime. Pagdin and Hardy (2018) explored investment and portfolio management to give a detailed account of the main concepts. According to the authors, adding new assets to a portfolio can influence the portfolio performance. Such is because the funds will need to achieve a specific minimum size to cater to the research and management costs. On the other hand, large funds lead to high chances of excessive costs, which lead to diminishing marginal returns. In the beginning stage, growth in the size of a fund leads to cost advantages. Most cost of the fund management will not be rising at the same rate the asset size rises. In later stages where the optimal size is exceeded, it leads to too large sizes of the funds. Too large funds lead to a distraction from the original objectives through high chances of investing in assets of lower quality. The administrative costs are also likely to rise because of the need to coordinate more staff members in the process. Ramesh (2018) conducted a study to investigate changes in the investors' attitudes towards mutual funds. The study found that funds could be incorporated into a fund family to achieve bigger sizes that might be viewed as more resourceful to the investors. Such could in turn lead to the achievement of greater economies of scale that are solely related to the size. Subsequently, there is an inverse link between the expense ratio in most fund families and fund size.

Researchers worldwide have analysed the relationship of the age of the fund and financial performance of mutual funds.Jones (2007) conducted a study to determine impact of fund age and size on its overall financial performance. The study used indices that had been developed using hedge fund information across different times to vary the ages to explore the volatility and performance of each fund. The study found out that young funds usually outperform older ones, especially because of the low levels of risks associated with them. Most investors would prefer funds that have been in the market for a short period and that they have not undergone elaborate participation. The relationship between fund age and performance was examined further by the study conducted by Sloots (2019). The empirical study was conducted in the European market through the application of a model is capable of selecting the appropriate security and market timing. The study arrived at the finding that older funds are highly likely to underperform as compared to younger ones. From this point of view, older funds have accumulated proportionately larger amounts of expenses in their lifecycle as compared to the younger funds. Furthermore, Cici et al. (2018) researched how the age of funds impact the portfolio performance. The study made the findings that there is trading efficiency for younger funds thus, leading to better returns. In the determination of the performance of portfolios, it is always advisable for investors to mix younger and older funds with the aim of hedging risks. In such a scenario, younger funds are able to earn more returns and thus, cut down any losses that might be attached to the funds.

Diversification of mutual fund have equally attracted attention of researchers. Kawas and Thiele (2017) conducted a study on the optimization of portfolio performance under the risks posed by uncertainty. According to the study, portfolio managers consider it better to maximize the market price of the portfolio and thus, the returns than to minimize the variability in the prices. The returns of a given portfolio usually change more significantly as compared to the market price levels. As such, the return measures of performance subordinates measures of risk in the market as opposed to the variability. The research found out that there is need to define the certainty limits to put the necessary measures to prevent poor performance for funds. In reality, the paper contributes to knowledge on the role of the risk of uncertainty in shaping investment decisions, especially given that uncertainty derails investment performance. Furthermore, Lantushenko (2015) conducted an empirical study to examine if the trading activities conducted by fund managers dealing with high-risk assets have an impact on investor utility. To facilitate the research, the study compared the returns from high-turnover portfolios with those of low-turnover ones. The findings of this study depict that high-turnover portfolios are more attractive to and preferred by risk-averse investors (Lantushenko, 2015). From this point of view, active portfolio management can lead to better investor utility, even in instances where the cost of gaining access to costly information is considered.

Rachmawati et al. (2020) explored the link between characteristics of management of investment funds and the turnover and ultimate performance of the funds in Indonesia. The characteristics, including the tenure and compensation and benefits, are critical determinants of the expenses incurred in the management of funds. According to the findings funds that have lower expenses have high chances of achieving better performance as compared to those with higher ones. While the employment of highly-skilled and competent fund managers is important, it is essential to incur minimal costs in terms of the managerial expenses of funds with the aim of optimizing their financial performance. However, some of the studies, including Miguel and Xiayue (2019) depict that there is no a major link between performance and the expense ratio. These studies conclude that there is only a slightly positive impact on the fund's turnover ratios. Additionally, the risk-adjusted returns and the related expenditures of active portfolios can be compared to those of the index funds while ensuring that the performance of funds is not linked to portfolio management fees. It is of common knowledge in many studies that investors mostly prefer funds that can generate adequate returns to cover any of the expenses they have incurred. From another point of view, the findings of these studies are not in agreement with the efficient market theory that proposes that the expenses incurred in trading and research are a waste in the market the security prices take into account all the available information. The EMT provides that active management of portfolio assets leads to expenses that are the negative of what is incurred in the acquisition of the information.

V. METHODOLOGY

The study employed descriptive research design that will aid in explaining funds factors to be examined thus giving greater insight on the performance of unit trusts without manipulation of the independent variable. The target population of the study was all 26 money market funds registered with CMA as of 31st December 2021. The sampling frame for the research was the 26-unit trust funds registered with CMA as of 31st December 2021). The study employed a census as the study will zero on all unit trust funds under CMA.

The study extracted secondary data from publication by CMA, audited financial statements and other published reports by management of funds. The data was sourced from 2017 to 2021. Annual data on economic growth, inflation and interest rate were obtained from Economic Survey published by Kenya Bureau of statistics. The study record extracted data on data collection sheets.

The collected data was processed with the aid of MS excel and STATA 14. The data collected was analysed using both descriptive and inferential statistical techniques. Descriptive analysis was utilized to come up with mean and standard deviation. Inferential statistics were utilized by use of multiple regression, ANOVA and correlation analysis to depict the relationship between subjects studied. The relationship between fund specific factors and Mutual funds' financial performance was established by employing the model stated in equation stated below. The model is a panel data model given that the data is panel in nature. Panel data can be analysed using pooled OLS, Random Effects Model, Fixed Effect Model and Dynamic Models. The panel regression model specification was as follows;

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5t} + \beta_6 X_{6t} + \beta_7 X_{7t} + \varepsilon \quad (1)$$

Where Y = Financial Performance of mutual measured by Sharpe Ratio and Jensen's alpha, X_1= Size of the fund measured by natural logarithm of book value of fund , X_2= Age of the fund in years ,X_3= Diversification of the fund measured by Herfindhal-Hirschman index (HHI), X_4= Management Efficiency of the fund measured by Expense Ratio, X_5 = Economic growth measure by percentage GDP , X_6= Inflation measured by CPI, X_7 = Interest Rate measured by 91 Treasury bill Rate, β_0 = intercept ,t = time, i= 1.....26, β_1, β2, β3, β4, β5, β6 and β_7 coefficients of explanatory variables.

VI. RESULTS AND DISCUSSIONS

1. Diagnostic Tests

Prior to performing regression analysis, the study performed various diagnostic tests which included linearity test, heteroskedasticity test, multi-collinearity, auto correlation, stationery test, Pooled OLS or Fixed effects and random or fixed effects test. These tests were critical in ensuring that the study data met the specific assumptions for the proposed regression analysis. The results of the tests are as described as outlined below;

Random Effect vs. Fixed Effect Models: The p-value of Hausman test in the Sharpe model was higher than 0.05 (P=0.892) level of significance. Hence it was concluded the random effect model was more preferable to fixed effect

model. Further, the p-value of Hausman test in the Jansen model was higher than 0.05 (P=0.7035) level of significance. Hence it can also be concluded the random effect model was more preferable to fixed effect model.

Pooled OLS vs. Random Effect Models:P=value in Breusch and Pagan Langrangian Multiplier test performed in Sharpe model was lower than 0.05 (P = .000) level of significance hence the study concluded that random effect model was preferable to pooled OLS model. The finding imply that panel effect was significant. The study revealed that the p=value in Breusch and Pagan Langrangian Multiplier test performed in Jensen alpha model was lower than 0.05 level of significance (p= .002) hence the study concluded that random effect model was preferable to pooled OLS model. The finding imply that panel effect was significant.

Test of Multicollinearity: All the VIF values were lower than 10 (2.18) hence the study concluded that multicollinearity was not a problem in the models adopted for analysis.

Test for Heteroskedasticity: The findings showed that the p-values (p=.000) in the Modified Wald test for heteroskedasticity was lower than 0.5 for the Sharpe ratio model implying the model was heteroscedastic. Hence the study would either adopt Random effect model with robust standard errors if the model does not suffer from serial correlation or Panel correlated standard errors model (PCSEs) if the model also suffers from serial correlation. The findings also showed that the p-value (p=.000) in the Modified Wald test for heteroskedasticity was lower than 0.5 for the Jensen model implying the model was heteroscedastic. Hence the study would either adopt Random effect model with robust standard errors if the model does not suffer from serial correlation or adopt panel correlated standard errors (PCSEs) if the model suffers from both group heteroskedasticity and serial correlation.

Serial Correlation: The study revealed that in the Sharpe ratio model, the p-value associated with Wooldridge test were lower than 0.05 level of significance (p= .0329) while that of the Jansen alpha model, the p-value associated with Wooldridge test were lower than 0.05 level of significance (p= .0011. The study thus concluded that the model suffered from autocorrelation problem thus adopting PCSEs model to fix the group heteroskedasticity and serial correlation problem.

Linearity Test: The findings based on regress syntax on Sharpe model showed that overall R was 0.5933 while the regress syntax on Jensen model had overall R of 0.6081. The R values for the two models were nearing 1 hence is can be concluded that the models were linear.

Stationarity Test: The findings showed that the Sharpe ratio model of unit trust funds return did not suffer from unit roots problem. The p-value associated with Hadri LM test was lower higher than 0.05 (p= 0.2817). Further Findings in Jensen Alpha model presented in also revealed that model did not suffer from unit roots (p= 0.5994).

2. Regression Analysis

Finally, the study carried out inferential analysis that involved Panel Correlated Standard Errors (PCSEs) given the presence of autocorrelations and group heteroskedasticity. The study thus adopted PCSEs model to establish the effect of fund-specific characteristics on the financial performance of mutual funds in Kenya. The regression output is compost of coefficient of determination, F-test and t-test. The finding presented in subsequent tables.

Table 1.2: Panel Correlated Standard Errors (Sharpe Model)

Group variable:	id	Number of obs	= 73
Time variable:	year	Number of groups	= 15
Panels:	correlated (balanced)	Obs per group:	
Autocorrelation:	panel-specific AR(1)	min	= 4
		avg	= 4.86667
		max	= 5
Estimated covariances	= 120	R-squared	= 0.6037
Estimated autocorrelations	= 15	Wald chi2(7)	= 172.15
Estimated coefficients	= 8	Prob > chi2	= 0.0000

sharpe	Panel-corrected Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lnfundsize	.0784545	.0082486	9.51	0.000	-.2401249	.1832153
fundage	.0098645	.0177072	0.56	0.577	-.0248409	.0445699
expratio	-9.476789	4.198729	-2.26	0.024	-17.70615	-1.247431
diversif	.3984416	.1840807	2.16	0.028	-.3543429	3.151226
gdp	.0301684	.0072401	4.17	0.000	-.0443586	.1159782
daytbillrate	-.4982509	.0810951	-6.14	0.000	-.6571944	-.3393075
inflation	-.0839638	.0430165	-1.95	0.051	-.1682747	.000347
_cons	6.380175	1.606611	3.97	0.000	3.231274	9.529075
rhos =	.9870123	.9034707	.685772	.9193919	.8537769 ...	.7965557

The coefficient of determination (R2 = .6037) presented in Table 1.2 revealed that the model comprising fund specific factors (fund age, fund size, fund diversification and fund management efficiency) and other covariates (economic growth, interest rate and inflation) explained 60.37% of the total variation in financial performance measured by Sharpe ratio. Further, the overall p-value associated with F-statistic was lower than 0.05 (p= 0.000) hence it was concluded that fund specific factors and other covariates (economic growth, interest rate and inflation) had a significant effect on financial performance of mutual funds as measured by Sharpe ratio. Further, the regression coefficients showed the effect of fund specific factors and other covariates on financial performance measured by Sharpe ratio. The study revealed that the effect of fund size on financial performance of mutual funds was major and direct (β1=.078, t= 9.51 and p= .000). The study also showed that fund age directly but not significantly explained financial performance of mutual funds measured by Sharpe ratio (β2=.0098, t=.56 and p= .577). Fund diversification had a direct and significant effect on financial performance of mutual funds (β3= .3984, t= 2.16 and p= .028). Further, the effect of fund management efficiency on financial performance of mutual funds measured by Sharpe ratio was inverse and major (β4= -9.47, t= -2.26 and p= .024). The study revealed that the effect of economic growth on financial performance of mutual funds was direct and significant (β5= .030, t= 4.17 and p= .000). The study also revealed that inflation and financial performance of mutual funds were inversely related (β6= .083, t= 1.95 and p= .051). Finally, the effect of interest rate on financial performance of mutual funds was inverse and major (β7 = -.4982, t= -6.14 and p=.000). The model was thus estimated as:
Yit = 6.38 + .078X1it +.0098X2it +.39X3it – 9.47X4it+.03X5t -.83X6t- .49 X7t..... (4.1)

Table 2.2: Panel Correlated Standard Errors (Jensen Model)

Group variable:	id	Number of obs	= 73
Time variable:	year	Number of groups	= 15
Panels:	correlated (balanced)	Obs per group:	
Autocorrelation:	panel-specific AR(1)	min	= 4
		avg	= 4.866667
		max	= 5
Estimated covariances	= 120	R-squared	= 0.5342
Estimated autocorrelations	= 15	Wald chi2(7)	= 166.3
Estimated coefficients	= 8	Prob > chi2	= 0.0004

jensen	Panel-corrected Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lnfundsize	2.64173	1.258753	2.10	0.036	-5.108841	3.174619
fundage	.079664	.7245978	0.11	0.912	-1.340522	1.49985
expratio	-168.4107	84.522	-1.99	0.041	-193.2458	-20.06713
diversif	29.28229	10.76722	2.72	0.029	-69.98529	31.42071
gdp	.070421	.9945714	0.07	0.944	-2.019745	1.878903
daytbillrate	-18.1241	8.420285	-2.15	0.031	-31.62064	4.627553
inflation	-17.3506	5.315367	-3.26	0.001	-27.76853	-6.932674
_cons	44.10814	48.68728	0.91	0.365	-51.31718	139.5335

rhos = -.0650029 .4699543 -.0989839 .575114 .0421465 ... -.1280274

The coefficient of determination (R2 = .5342) presented in Table 4.13 revealed that the model comprising fund specific factors (fund age, fund size, fund diversification and fund management efficiency) and other covariates (economic growth, interest rate and inflation) explained 53.42% of the total variation in financial performance measured by Jensen alpha. Further, the overall p-value associated with F-statistic was lower than 0.05 (p= 0.000) hence it was concluded that fund specific factors and other covariates (economic growth, interest rate and inflation) had a significant effect on financial performance of mutual funds as measured by Jensen Alpha. Further, the regression coefficients showed the effect of fund specific factors and other covariates on financial performance of mutual funds as measured by Jensen alpha. The study revealed that the effect of fund size on financial performance of mutual funds was major and direct (β1= 2.6417, t= 2.10 and p= .036). The study also showed that fund age directly but not significantly explained financial performance of mutual funds measured by Jensen alpha (β2=.0796, t= .11 and p= .912). Fund diversification had a direct and significant effect on financial performance of mutual funds (β3= 29.28, t= 2.72 and p= .029). Further, the effect of fund management efficiency on financial performance of mutual funds measured by Jensen alpha was inverse and major (β4= -168.4, t= -1.99 and p= .041). The study revealed that the effect of economic growth on financial performance of mutual funds was direct but not significant (β5= .0704, t= .07 and p= .944). The study also revealed that inflation and financial performance of mutual funds were inversely and significantly related (β6= -17.35, t= -3.26 and p= .001). Finally, the effect of interest rate on financial performance of mutual funds was inverse and major (β7 = -18.12, t= -2.15 and p=.031). The model was thus estimated as: Yit = 44.1 + .264X1it +.07X2it +29.2X3it – 168.4X4it +.07X5t -17.3X6t - 18.1X7t..... (4.2).

CONCLUSION and RECOMMEDATION

The study makes a number of conclusions. The first objective sought to determine the effect of size of the fund on the financial performance of mutual funds in Kenya. The study revealed that the effect of fund size on financial performance of mutual funds was major and direct. The null hypothesis (H_{01}) that the fund size has no significant impact on financial performance of mutual funds in Kenya was thus rejected. The study concluded that increasing fund size was associated with increasing financial performance. Lager mutual funds are able to enjoy economies of scale as the cost of funds management is distributed over the funds hence reducing average management costs. Further, larger pool of funds can be invested effectively to highly earning marketable investment opportunities. The second objective sought to assess the

effect of the age of the fund on financial performance of mutual funds in Kenya. The study established that fund age explained financial performance of mutual funds in Kenya. The null hypothesis (H_{02}) that the age of the fund has no significant impact on the financial performance of mutual funds in Kenya was not rejected. The study therefore concluded that increasing fund age led to increasing financial performance of the mutual. Further, the study concluded that older funds tended to perform better given that the funds management had accumulated adequate experience needed in the management of the fund hence the direct causal effect link. The third objective sought to analyse the effect of diversification of the fund on financial performance of mutual funds in Kenya. The study established that fund diversification had a direct and significant effect on financial performance of mutual funds. The null hypothesis (H_{03}) that the diversification of the fund has no significant impact on the financial performance of the mutual funds in Kenya was thus rejected. The direct effect of funds diversification on mutual fund performance in Kenya implied that as the fund became diversified into various financial assets, the performance of such fund increased. The increased diversification of funds was associated with spreading diversifiable risks among more assets hence lowered overall risk and improved financial performance. The final objective sought to examine the effect of management efficiency of the fund on financial performance of mutual funds in Kenya. The results revealed that fund management efficiency had an inverse effect on financial performance of mutual funds. The null hypothesis (H_{04}) that the management efficiency of the fund has no significant impact on the financial performance of mutual funds in Kenya was rejected. The study therefore concluded that increasing management inefficiency of the fund is associated with reducing financial performance of the mutual fund. Further, increasing expense ratio means increasing management inefficiency hence reduced financial performance of the fund.

The study makes recommendations based on study findings and conclusions. First, regarding the direct effect of size of the fund on financial performance of mutual funds, the study recommends to fund managers to increase the size of funds through growth of the same. The fund managers should increase size of the fund under their management by aggressively seeking to grow the funds. The fund managers should aggressively market their funds to the general public to attract additional funding aimed at growing the fund. Second, with respect to direct effect of fund diversification on financial performance of mutual funds in Kenya, the research recommends to fund managers to continue diversifying the specific funds under their management in line with respective laws. The fund managers can diversify funds under their management through spreading the pooled funds over a number of financial assets including shares, government securities, deposits in financial institutions, commercial papers among other assets. Third, given the inverse effect of management efficiency of the fund on financial performance of mutual funds in Kenya, the study suggests to fund managers to improve their efficiency. The fund managers should eliminate any wastages and ineffectiveness that may results to increased management cost of the fund. Further, the fund managers should take advantage of economies of scale by increasing funds size so as to lower average cost of funds management thus improved management efficiency.

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