The Moderating Role of Fund Size on the Relationship between Disposition Effect and Portfolio Financial Performance of Mutual Funds in Kenya

Douglas Simiyu Wafula[1]
Prof. Tibbs Charles Yugi[2]
Prof. Benedict Ondiek Alala[3]

[1]wafulads2014@gmail.com; +254727987156; +254733477090
[2]tibbscharles@yahoo.com
[3]ondiekalala@yahoo.com

[1]https://orcid.org/0000-0002-3302-9833
[2]https://orcid.org/0000-0001-8261-2091
[3]https://orcid.org/0000-0001-9672-8984

[1]Ph.D, Student, [2,3]Ph.D, Lecturers, Masinde Muliro University of Science and Technology [MMUST], Kenya

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ABSTRACT

Several Kenyan mutual funds' financial performance has recently been on the downturn. Overall, variations in critical criteria reveal variable economic performance over time among Kenya's mutual funds. It was crucial to assess whether the portfolio performance pattern may be attributed to behavioral investing traps. The objective of this study was to determine how the disposition effect affected the financial performance, and how closely the fund size affected the relationship between behavioral investment traps and mutual funds' performance. The research method used was a causal research design. Data from a study panel were gathered. Over an eleven-year period, from 2011 to 2021, secondary data was obtained from mutual funds' previously published financial statements. Secondary data was acquired using the data collection tool. Data analysis was done with Stata software, version 15. The unit root test, a stationarity test, was carried out. Panel data regression was applied. The use of regression analysis with fixed and random effects was also carried out. The Levin-Lin-Chu test, the Augmented Dickey-Fuller test, the Im-Pesaran and Shin tests, the Philips-Peron test, and the Hadri 2000 test were all used to evaluate the validity and reliability of the data. Jarque-Bera test was employed to evaluate normality. In the panel analysis, the random effects model and the fixed effects model were separated using the Hausman test. The variables were distributed properly, as shown by the skewedness and kurtosis tests. There was no approaching multicollinearity among the variables, according to the pairwise correlation study. The results of this study revealed that disposition effect had a negative but substantial influence on financial performance of mutual funds in Kenya with a regression coefficient of -0.5455628. The study additionally found that fund size with a probability value of 0.1560 which was not significant. This therefore shows that fund size does not have a significant effect on the relationship between disposition effect and mutual funds financial performance. The results of this study demonstrated that the disposition effect had a negative but considerable impact on the financial performance of the Kenyan mutual fund. This suggested that the financial performance of mutual funds in Kenya is subject to a sizeable yet adverse disposition effect. According to the results of the multiple regression study, the financial performance of mutual funds in Kenya was negatively but significantly impacted by the disposition effect. But when institutional investors and fund managers are dissecting financial investing decisions, they should not use behavioral investment traps in isolation. Based on the findings, stakeholders should be aware of the information that fund managers in institutional investors are not insusceptible from behavioral biases arising from behavioral finance in the financial investment decision making processes.

Keywords: Disposition effect; Mutual Funds' Portfolio Financial Performance; Fund Size; Mutual Funds; Kenya

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I. INTRODUCTION

Stockholders are seen to be balanced wealth builders who also cast a shadow over theories of current financial regulations in the theory of conventional finance. The Capital Asset Pricing Theory and the Modern Portfolio Theory are the two most important concepts in security investment and decision-making processes. The results of numerous empirical studies in countless financial markets have shown that financial investment decision-making is not always based on the fundamentals of theories of modern finance, and as a result, behavioral finance studies has recently emerged as a significant model in security investment and decision-making (Ogunlusi & Obadeni, 2019; Bakar & Yi, 2016; Raut et al., 2018). In cases where there are no satisfactory answers provided by contemporary financial principles, behavioral finance attempts to explain investor behavior (Areiqat et al., 2019).

1.1 Research objectives
1.2.1 General objective
The broad objective of this research was to find out the influence of disposition effect on the mutual funds' portfolio financial performance in Kenya using fund size as the moderating role.
1.2.2 Specific objectives
i) To explore the effect of disposition effect on portfolio financial performance of mutual funds in Kenya.
ii) To examine the moderating effect of fund size on the relationship between disposition effect and portfolio financial performance of mutual funds in Kenya.

1.3 Research hypotheses
The research was guided by the following hypotheses.

H_{01}: disposition effect does not significantly affect portfolio financial performance of mutual funds in Kenya.

H_{02}: Fund size does not significantly moderate the correlation between disposition effect and portfolio financial performance of Kenyan mutual funds.

II. LITERATURE REVIEW

A relatively recent development in asset investment decision-making is behavioral finance. For an extended period of time, many investors, mostly seasoned investors, have repeated on the idea that psychological factors can significantly explain market behavior. According to Karanja (2017), this arrangement appears to increase knowledge and understanding of investor behavior, including decision-making processes for asset investments in securities.

The fictitious literature review provided some ideas related to the financial investing performance of mutual funds. The Modern Portfolio Theory (MPT), Prospect theory, the Efficient Market Hypothesis (EMH), and the Capital Asset Pricing Model (CAPM) were some of the advanced theories.

2.1 Theoretical Literature Review
2.1.1 Prospect Theory
According to Tversky and Kahneman's prospect hypothesis, which they proposed in 1979, investors interpret gains and losses differently, giving apparent gains more weight than perceived losses. According to prospect theory, if given an equal choice, an investor will pick the option that offers the potential for gains over the option that offers the potential for loss. These theories assert that the best risky prospects exhibit a wealth of distinct characteristics that contradict the predictions made by modern portfolio theory; stockholders frequently undervalue issues that are most likely in conflict with conclusions that are realized with great confidence, leading to risk aversion in decisions involving unquestionable successes and risk undertaking in decisions involving certain losses. According to Rossi (2018), prospect theory summarizes distinct situations of information that are anticipated to influence institutional and individual investment decision-making processes. Investors' behavioral characteristics are interpreted according to their mental states while they consider making investments and modifying the securities in their portfolio (Kahneman & Tversky, 1979).

One criticism of the prospect theory is that its psychological reasons for the development it discusses are lacking. The criticism comes from other psychologists who note that the model is deficient in features like sentimental retorts and human emotional characteristics, which are crucial in the decision-making processes for financial investments. The bordering hypothesis, which explains why players create the frames they do, is another aspect of the theory that has drawn criticism. In the current climate of supreme consumer behavior, framing that is based on an unbalanced arrangement of information is unethical. Decision-makers frequently have to compromise between opposing points of view while considering multiple issues. Prospect theory is criticized for being taken out of psychology without giving it proper credit for requiring complex mathematical calculations that are beyond the capabilities of the average person, for failing to examine information processing during prospect theory decisions, and for failing to account for real-world decisions like significant product and service decisions made by customers.

2.2 Conceptual Literature Review
2.2.1. Disposition Effect
The disposition effect advises investors to develop strategies to anticipate paper gains and avoid realizing paper losses. From this point on, stockholders tend to sell investments whose value has increased while retaining investments whose value has decreased, holding losers for a longer period of time and selling investments in addition

to winners virtually immediately. Budhiraja et al. (2018) advise stockholders in developing markets, such as China, to create a practice of suffering on or after exercising disposition impact by selling stocks that have valued.

2.2.2 Fund Size

A mutual fund's fund size is carefully considered to be a crucial component that affects the yields that mutual funds obtain (Ciccotello & Grant, 1996; Yan, 2008). The size of a mutual fund refers to the total amount of the trust that the investment fund manager will be responsible for managing. The assets included in the portfolio display a strong performance or there is a spike in the introduction of investors' resources, depending on how the entire securities under management of the joint fund spread (Cicotello & Grant, 2008).Fund size tend to increase depending on the situation. The mutual fund's prior success is what led to the invasion of stockholder funds (Bouteska & Boutheina, 2017).

2.3 Review of the Empirical Literature

This section examined a variety of studies that were connected to the subject matter. There are a lot of studies about mutual funds available in general. However, the number of experimental studies on the financial performance of empirical mutual funds is only marginally significant. This study's analysis aimed to review a number of researchers' conclusions.

2.3.1 Disposition Effect and Portfolio Performance

In a developing stock market, Aftab et al. (2016) conducted study on disposition effect and stock pricing. This study examined the Karachi Stock Exchange's (KSE) disposal effect and its impact on asset price in a comparable market. Data analysis for experimental conclusions was done using regression analysis. The findings indicated a disposition impact in the Karachi Stock Exchange and, somewhat surprisingly, showed that the disposition effect lowers anticipated returns. In this study, the disposal effect was integrated into the conventional asset price model. The study made use of a sample of KSE-100 index businesses during the years of 2003 and 2007. The findings demonstrated that the disposition impact is absent after just one year. As a result, the disposition effect is dominant in the KSE and the beta of additional market returns is favorably associated with expected returns, whereas the disposition effect is inversely correlated with the return of the stock. As a result, the disposition impact lowers actual incomes.

Disposition spread is not a pervasive bias, but it does exist across funds. During times of crisis, this influence is particularly strong, although it is lessened in large management businesses or those that are a part of bank holding groups. The disposition impact depends primarily on the type of transactions, rather than just being a cognitive bias that is inherent to the individual. Stocks with poorer past returns, domestic stocks, low portfolio weights, and partial sales are disposition-prone. It is established that there is a disposition effect, although investors are not affected in terms of fund performance (Andreu et al., 2020). On average, American equities funds favor realizing capital losses over gains. However, a sizeable portion displays the disposition effect, which results in realizing benefits more quickly than losses. The characteristics of value-oriented and contrarian investment strategies are affected by disposition-driven behavior, which lowers market betas, but it has no discernible impact on fund performance (Cici, 2012). Investors in mutual funds display a high disposition impact. The propensity to hold on to loser assets is reduced in part by literacy: in addition to having a university degree, more financial understanding and stronger math skills also lessen the disposition impact. The way that experience shapes this bias depends in part on literacy. Even after taking into consideration redemption costs, negative feelings, irrational beliefs, market mood, and the existence of a scapegoat, there is still evidence of the disposition effect (Silva et al., 2020).

2.3.2 Fund Size and Portfolio Performance

Ramesh and Dhume (2014) conducted study on fund size and its impact on the financial performance of mutual funds, looking at practical advice from specific Indian mutual fund companies. The primary goal of this study was to evaluate the impact of mutual fund characteristics on the financial investing performance of mutual funds in India. Fund Size, Flow of the Fund, Age of the Fund, Expense Ratio, and Turnover Rate of the Portfolio were all taken into consideration when doing the research. The findings show that an increase in mutual fund inflow wears down the financial performance of those funds. Increased portfolio turnover rates cause the expenditure ratio to rise, showing that sophisticated trading activities incur higher expenses. Mutual fund investing has increased dramatically over the past few decades, as has its importance to many economies. A number of variables, including fund size, have an impact on the success of mutual funds (Farid & Wahba, 2022). Gaining more money is the main objective of all investments made by investors. This becomes apparent as share prices increase. However, Kenyan unit trusts have

performed badly when compared to their international counterparts. The bad performance has an effect on the accomplishment of financial stability in line with Kenya Vision 2030 in addition to scaring away individual and corporate investment. In empirical literature from developed and developing nations, the idea of fund size is put out as an explanation for the success of unit trust funds (Nthimba et al., 2021).

2.4 Conceptual Framework
        The financial performance of Kenyan mutual funds' financial investments served as the study's dependent variable. Disposition effect was used as the independent variable. Fund size was also a moderating element in the study. The conceptual framework is summarized by Figure 1 below.
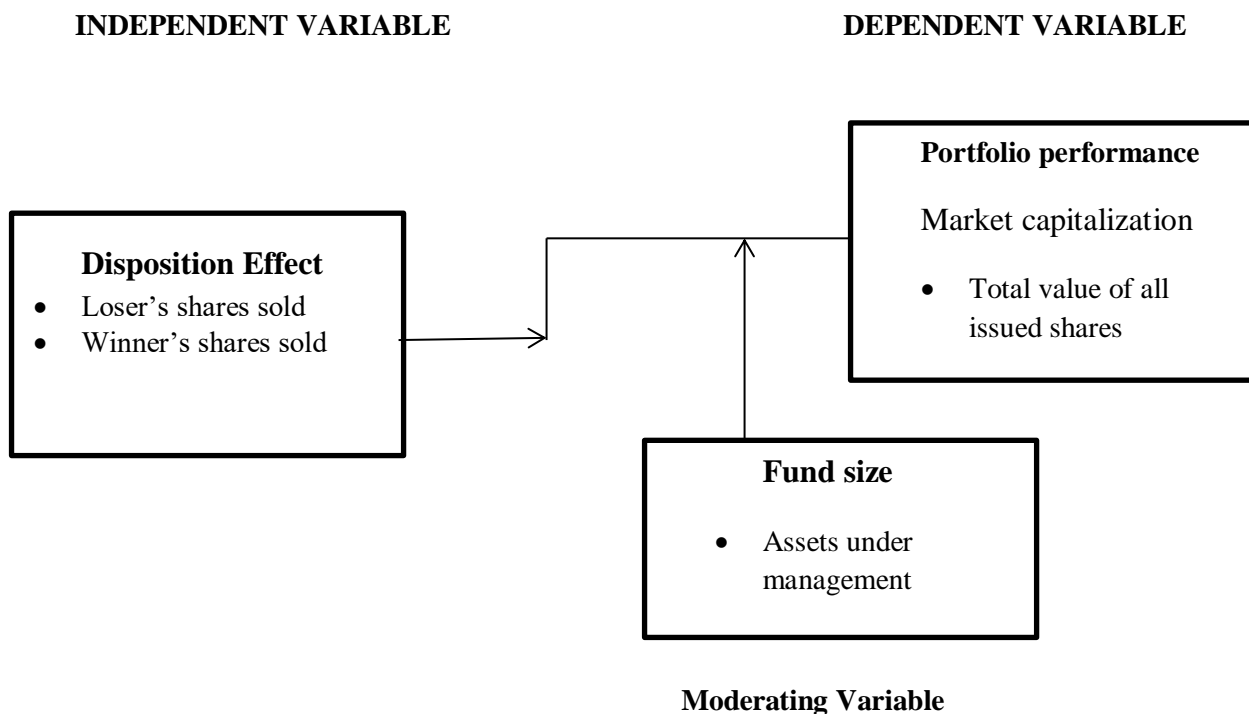
INDEPENDENT VARIABLE   **DEPENDENT VARIABLE**

Figure 1
Conceptual Framework

III. RESEARCH METHODOLOGY

3.1 Research Design
        A causal research strategy was adopted in this study. This required determining the impact disposition effect has on Kenya's mutual fund portfolio performance. In Kenya, disposition effect was exploited in order to track changes in the performance of mutual funds' portfolios. Using panel data regression analysis, this study assessed, described, and investigated the effects of disposition effect on the financial performance of mutual funds in Kenya from 2011 through 2021. To choose the most recent data, this was done.

3.2 Data collection instruments
        This study examined how disposition effect affected the financial performance of mutual funds in Kenya using secondary data. The secondary data covers an eleven-year period beginning in 2011 and ending in 2021 and was derived from previously published mutual fund financial statements. The retirement benefits authority databank, the World Bank's online database, and the capital markets authority were some of the secondary data sources.

3.3 Data analysis
        Stata software version 15 was used to conduct the data analysis. The Panel data regression model was used since it allowed for individual specific variables and protected against the heterogeneity associated with mutual funds in Kenya.

A fixed and random effect regression analysis model was used to investigate the association between the financial performance of mutual funds as a dependent variable and disposition effect as an independent variable. The following relationship was created using the model:

$Y_t = \beta_0 + \beta_1 OC_t + \varepsilon$ where;

Y_t = Mutual fund financial performance at time t. β_0 = Intercept term which is the mutual fund financial performance when all other factors remain constant i.e. t=0

DE = Disposition Effect at time t and ε = Statistical error term.

By including fund size in the regression equation and taking its influence into account, the moderating effect of fund size on the effect of disposition on the financial performance of mutual funds in Kenya was also investigated. The following was determined about the correlation:

$Y = \beta_0 + \beta_1 DEFS + \varepsilon$ where FS= Fund size as a moderating variable.

3.4 Measurement of Study Variables

The subsequent research variables were assessed in a similar manner:

Market capitalization, was calculated using the Oluwatoyin and Gbadebo (2009) methodology which was used to measure portfolio performance. This model is described as: $MKTCAP = \beta_0 + \beta_1 TNO + \beta_2 PAT + \beta_3 DIV + e$. where: e = error term, PAT: Profit after Tax, TNO: Turnover, DIV: Dividends and MKTCAP: Market Capitalization.

3.4.1 Disposition Effect

The Weber and Camerer (1998) model, which measured the disposition effect, suggested the following representation: $DE = \frac{S_+ - S_-}{S_+ + S_-}$

This proxy lists a coefficient of disposition for each subject that is determined as the difference between shares sold that were winners S+ (the stock has winners S+ or stock that has enhanced value) and shares sold that were losers S (the stock has dropped in value).

IV. DATA ANALYSIS & DISCUSSION

Results from the research design mentioned earlier are granted in this section, along with a discussion of them.

4.1 Descriptive Statistics

In this section, descriptive details are given for each parameter used in the study. Several important statistical indices or measures that are used to summarize data, such as measures of spread, measures of location, measures of correlation, statistical averages, and measures of skewness, as well as additional raw data measures, are of interest to descriptive statistics (Kothari, 2004). A summary of the descriptive statistics for each parameter used in the study, including the dependent variable, market capitalization, and the independent variable, disposition effect, is presented in Table 1 below.

Table 1
Descriptive Statistics

Statistic	Market Capitalization	Fund Size	Disposition Effect
Mean	20.50923	20.50923	-0.0471938
Se(Mean)	0.060926	0.192289	0.0024062
Maximum	22.38728	25.70594	0.0000000
Minimum	18.23680	16.24238	-0.1259354
Std Dev	0.808280	2.551005	0.0319214
CV	0.039410	0.124383	-0.6763891
Obs(N)	176	176	176

The Market capitalization, Fund size, disposition effect log and statistics: (Mean, Se (mean), Max, Min, Std Dev, CV, Obs (N)) by categories of year summary.

From Table 1 above the disposition effect mean was -0.0471938. The maximum for disposition effect was 0.000000 while the smallest for disposition effect was -0.1259354 and the spread or standard deviation stood at 0.0319214. The standard error for the mean was 0.0024062. This was explained by the fact that the variables' data was normally distributed. This demonstrated the erratic reliability and similarly demonstrated that the traditional presumptions were upheld. The inference was that the disposition effect variable did not significantly deviate from the likely mean. The disposition effect was presented in Figure 1.
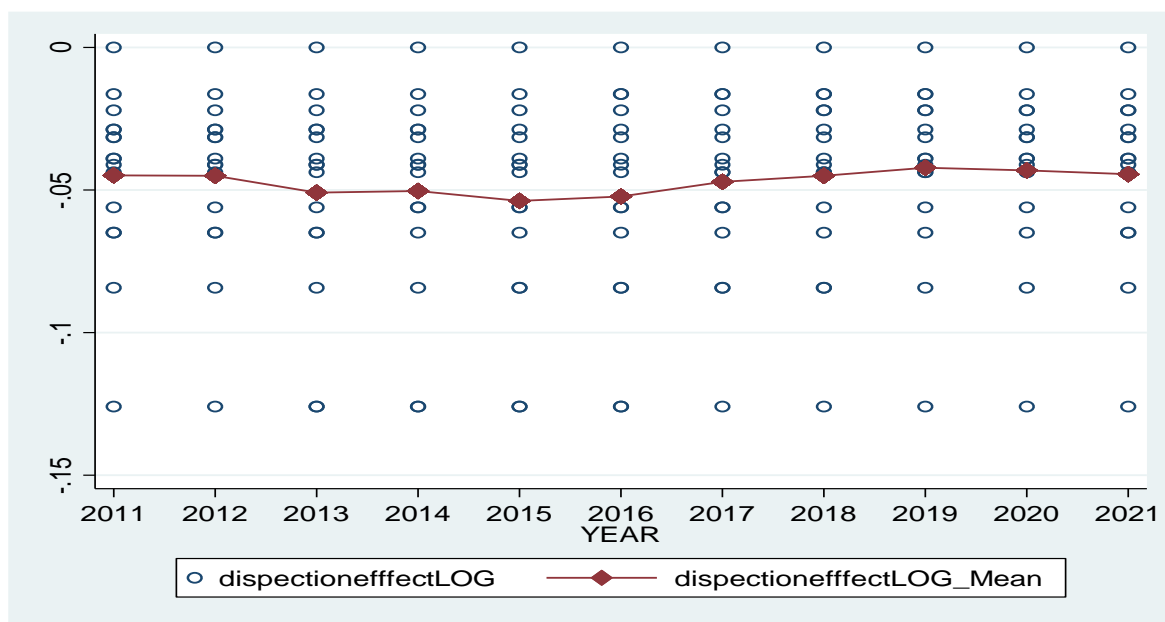

Figure 1
Descriptive Statistics Analysis –Disposition Effect

4.1.1 Normal Distribution Analysis
Table 2
Normal Distribution Analysis

Statistic	Market Capitalization	Fund Size	Disposition Effect
Skewness	0.319224	0.638237	-1.089272
Kurtosis	2.836192	2.210537	3.782764
Jarque-Bera	3.186000	16.52	39.3
Probability	0.000000	0.000000	0.000000
CV	0.039410	0.124383	-0.6763891
Observations	176	176	176

The homogeneous skewness and kurtosis moments were established in this study. In this investigation, the Jarque-Bera test, which was generated from the kurtosis and skewness estimations, was also enhanced. According to Table 2 above, the market capitalization, which is the dependent variable, had a skewness value of 0.319224. The fund size, the moderating variable, has a skewness value of 0.638237. The skewness value for the independent variable disposition effect was recorded as -1.089272.

The recorded figures for kurtosis are 2.836192, 2.210537, 3.782764, respectively, for market capitalization, fund size and disposition effect. The probability values obtained as a result of the Jarque-Bera test statistic results implied that, at a 5% level of significance, all of the variables passed the normality test. The study refuted the null hypothesis H_0 that the distribution of the data in this investigation's interpretation was not equal.

4.2 Model Specification Tests
Alongside the panel data, a number of model specification tests were run to see if the models could be used for mathematical study. The Pearson test for correlation, the multicollinearity test, the autocorrelation test, the unit root tests, and the heteroscedasticity test were among the model specification tests that were used to determine

whether or not the panel data met the requirements for basic multiple linear regression analysis. This section provided the findings of numerous pinpointing tests supported by organized data, along with considerable remedial action undertaken to ensure the accuracy of the data.

4.2.1 Pearson Correlation Test
Table 3
Pearson correlation test for Market capitalization, Fund Size and Disposition effect log Observations

Variable	Market Capitalization	Fund size	Disposition effect log
Market Capitalization	1.0000 176		
Fund size	0.3168 0.000 176	1.0000 176	
Disposition effect log	-0.0484 0.5236 176	0.0936 0.2164 176	1.0000 176

The results of pairwise correlation show that there was no multicollinearity issue. The slight correlation between the independent and dependent variables was an excellent sign and, as a result, a key indicator of orthogonality. This suggested that someone could fit a regression equation without running into managing collinearity concerns. Currently, it was common practice to perform a correlation analysis first and a regression analysis thereafter. As a result, the entire independent variable was set aside for further research.

4.3 Unit Root Test

Table 4
Unit Root Test at 5% Significance Level

Market Capitalization	Method	Statistic	Prob.	Interpretation
	Null:Unit root(assumes common unit root process)			
	Levin,Lin& Chut*	-11.6234	0.0000*	Stationary
	Hadriz-stat	11.7875	0.0000*	Stationary
	Null:Unit root(assumes individual unit root process)			
	Im,Pesaran& ShinW-stat	-3.7078	0.0001*	Stationary
	ADF–Fisher Chi-squared pm	8.9956	0.0000*	Stationary
	PP – Fisher Chi-squared pm	8.9956	0.0000*	Stationary
Fund size	Method	Statistic	Probability	Interpretation
	Null:Unit root(assumes common unit root process)			
	Levin,Lin& Chut*	-2.8548	0.0022*	Stationary
	Hadriz-stat	2.3891	0.0084	Stationary
	Null:Unit root(assumes individual unit root process)			
	Im,Pesaran& ShinW-stat	-0.9955	0.0015*	Stationary
	ADF– Fisher Chi-squared pm	3.5095	0.0002*	Stationary
	PP – Fisher Chi-squared pm	3.5095	0.0002*	Stationary
Disposition Effect	Method	Statistic	Probability	Interpretation
	Null:Unit root(assumes common unit root process)			
	Levin,Lin& Chut*	-4.4082	0.0000*	Stationary
	Hadriz-stat	10.8767	0.0000*	Stationary
Null:Unit root(assumes individual unit root process)				
	Im,Pesaran &ShinW-stat	-2.0200	0.0001*	Stationary
	ADF– Fisher Chi-squared pm	8.2770	0.0000*	Stationary
	PP – Fisher Chi-squared pm	8.2770	0.0000*	Stationary

Each and every variable used in the investigation was subjected to panel unit root tests to ascertain whether or not panel data were stationary. Table 4 above showed that all 16 cross sections were stationary. The results for the cross-sections of the parameters, including fund size, market capitalization, loss aversion, herd behavior, disposition effect, as well as overconfidence, were discussed. The experiments showed that all variables displayed stationarity for all cross-sections when assessed concurrently. Additionally, there was no unit root issue, as shown by the high probability of 0.0000 and the fact that the unit root's null hypothesis H_0 was rejected.

4.4 Heteroscedasticity Test
Table 5
Heteroscedasticity Test
Breusch and Pagan Lagrangian multiplier test for random effects
MARKET CAPITALIZATION
Estimated results:

Variable	Variance	Std Dev =sqrt(variance)
Market Capitalization	0.6533170	0.8082803
e	0.5050168	0.7106454
u	0.1207800	0.3475342

Test statistics

F- Statistic	1.73924	**Obs* R-squared**	2.976238
ProbabilityF(1, 15)	0.27650	**Probability Chi-square**	0.146500
Var(u)	0.00000	**Chibar2(01)**	28.27000
Probability>Chibar2	0.00000		

In order to refute the statistical hypothesis that the error relations had a permanent adjustment, the test for heteroscedasticity intended that previous error terms predisposed other error relations. However, the financial performance of mutual funds, which is the dependent variable, has an equivalent level of inconsistency for any value of the independent variables, according to the homoscedasticity hypothesis (Garson, 2012). A homoscedasticity test was used to look for consistency in the residuals from the regression equation. The distribution of the data was normal if the discrepancy of the error terms at hand was identical. Heteroscedasticity was defined as the absence of an analogous inconsistency level for each value of an independent variable.

4.5 Hausman Test
Table 6
Hausman Test
Hausman fixed random Coefficients

Variable	Fixed (b)	Random (B)	Difference (b-B)	S.E Sqrt(dia(gV_b-V-B))
Disposition Effect log	0.7309071	-0.5455628	1.2764700	1.2331040

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg
Test: Ho: difference in coefficients not systematic
chi2 (4) = (b-B)'[(V_b-V_B) ^ (-1)] (b-B)   =   8.81
Prob>chi2 =   0.0061

The Hausman test was still regarded as valid for the definite panel data regression in order to establish the approximate influences between random and fixed effects and to produce improved research outcomes. The test was carried out in defiance of the null hypothesis H_0, which claimed that the random effects ideal was the favored one. The test findings rejected the null hypothesis H_0 if the panel data's chi square statistic was significant at the 5% level of significance; otherwise, the null hypothesis H_0 was acknowledged.

4.6 Panel EGLS Random Effect-Model

Table 7
Panel EGLS Random Effect-Model
Dependent Variable: Market Capitalization; Method: Panel EGLS Random Effect Model

Variable	Coefficient	Std. Error	t statistic	probability
Disposition effect	-0.5455628	0.1913090	-1.08	0.0020
Constant	0.9130920	0.0655430	29.18	0.0000

Test Statistics

R-squared	0.68900	**Adjusted R-squared**	0.68610
Mean Dependent variable	0.257156	**S.D. Dependent variable**	4.067320
S.E. of Regression	0.795340	**F-statistic**	243.5647
Prob(F-statistic)	0.000100	**Sum squared residuals**	114.3304

5% level of significance

Using the linear regression model, the relationship between the dependent variable and the independent variable can be summed up as follows:

$Y_t = 0.9130920 - 0.5455628D_t + \varepsilon$ where;

Y_t = Mutual fund financial performance at time t. (0.9130920) β_0 = Intercept term which is the mutual fund financial performance when all other factors remain constant i.e. t=0, βi is the regression coefficient for the independent variables at time t and D = Disposition effect at time t. ε = Statistical error term.

4.6.1 Influence of disposition effect on mutual funds' financial performance in Kenya

The coefficient of disposition effect variable was determined to be -0.5455627 from the results of the multiple linear regressions shown in Table 7. When all other factors impacting the financial performance of mutual funds are held constant, this constant revealed that a rise in the disposition effect by one unit caused a decrease in the financial performance of mutual funds in Kenya to fall by a value of 0.5455628 units. The finding of this research showed that disposition effect had a negative substantial influence on mutual funds financial performance in Kenya. This Outcome consequently discloses that the null hypothesis H_0 of the variable of disposition effect had a noteworthy influence and was disallowed.

4.7 Moderating effect of fund size

Table 8
Moderating Effect of Fund Size

Variable	Coefficient	Std. Error	t statistic	probability
Disposition effect Fund size	1.056512	0.7409770	29.18	0.1560
Constant	0.913092	0.0655430	29.18	0.0000

Dependent Variable: Market Capitalization; Method: Moderation hierarchical-moderating effect of fund size

Test Statistics

R-squared	0.583197	**Adjusted R-squared**	0.582364
Mean Dependent variable	0.653317	**S.D. Dependent variable**	3.198300
S.E. of Regression	0.743100	**F-statistic**	456.9547
Prob(F-statistic)	0.000000	**Sum squared residuals**	114.3304

5% level of significance

From table 8 above, it was determined that fund size with a probability value of 0.1560 which was not significant.This therefore shows that fund size does not have a significant effect on the relationship between disposition effect and mutual funds financial performance.

The correlation between the independent variable and the dependent variable can be summarized by use of the linear regression model as follows:

$Y_t = 0.913092 + 1.056512DEFS_t + \varepsilon$ where FS= Fund size as a moderating variable;

Y_t = Mutual fund financial performance at time t. (0.9130920) β_0 = Intercept term which is the mutual fund financial performance when all other factors remain constant i.e. t=0, βi is the regression coefficients for independent variable at time t and D = Disposition effect at time t. $\boldsymbol{\varepsilon}$ is the Statistical error term.

Table 9
Hypothesis Rejected Founded on the Implication of Outcomes

Hypothesis	Sign	Significance	Decision
H_{01}: disposition effect does not significantly affect portfolio performance of mutual funds in Kenya.	Negative	Significant	H_{01} Rejected
H_{02}: Fund size does not significantly moderate the correlation between disposition effect and portfolio financial performance of Kenyan mutual funds	Positive	Insignificant	H_{02} Accepted

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

In this study, the disposition impact was investigated in relation to the financial performance of mutual funds in Kenya. Weber and Camerer (1998) used the difference between the winners' stock and stock that increased the value of the sold shares, and the losers' stock, or stock that lowered its value of the sold shares, to measure the disposal impact. The findings of this study showed that the Kenyan mutual fund industry's financial performance was negatively but significantly impacted by the disposition effect.

This implied that there is a considerable yet unfavorable disposition effect on the financial performance of mutual funds in Kenya. The null hypothesis H_0 was rejected because the disposition effect parameter had a significant negative impact on the financial performance of mutual funds in Kenya.

5.2 Recommendations

From the investigation, it is apparent that models of behavioral finance complement the standard simulations of investment investigation largely utilized for making financial investment decisions by mutual funds in Kenya. These standard investment models are not fully empirically reinforced and therefore create room for the effect of behavioral investment biases in the entire investment framework. From the findings obtained from the multiple regression analysis, disposition effect with a regression coefficient of -0.5455628 had a negative but substantial influence on the financial performance of mutual funds in Kenya. However, behavioral investment traps should not be utilized in seclusion during financial investment decision making scrutiny by fund managers in respective institutional investors. Shareholders however, should be aware of the information that fund managers in institutional investors are not insusceptible from behavioral biases arising from behavioral finance in the financial investment decision making processes.

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