PERFORMANCE OF EQUITY FUNDS IN KENYA OVER THE PERIOD 2005-2009

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Abstract

This research evaluates the performance of equity mutual funds in Kenya. The objective was to compare fund performance for the period 1st January 2005 to 31st December 2009. The research was motivated by the facts that there is hardly any research on mutual funds carried out in less developing economy such as Kenya. The target population was all mutual funds in Kenya. The research used both primary and secondary data. As a source of primary data, structured questionnaires and scheduled interview were used. The secondary data included mutual funds daily returns and annual reports for the period 2005 to 2009 so as to calculate the net asset value and also performance of mutual funds in Kenya. Performance of mutual funds was analyzed using composite performance evaluation models. Over the research period, the finding was that the mutual funds did not perform better than the market on a risk- adjusted basis using various performance measures. The funds were neither preferable nor outperform the market. Further, there were no portfolio diversifications as shown by lower coefficient of determination. However, the individual funds risks were generally lower compared to that of the market as measured using standard deviations and beta. This was consistent with many other empirical findings. The study found that fund management despite its growth was seen as a back office function, a staff function, or a reporting function by financial institutions. It is therefore recommended that the financial institutions should view fund management as a profit Centre and put it on an independent basis so as to enhance its growth. Similarly, there were many investors whose funds could be pooled so as to realize full advantages of funds management but may not be so due to lacking of information. The study therefore recommends outreach activities by mutual funds so as to enlighten investors on its advantages.

Key words: Mutual funds, fund managers, unit trust, portfolio, risk, returns, beta

1.0 Introduction

Like other parts of the world's financial markets, Mutual funds in Kenya have experienced tremendous growth, both in assets value and the number of funds. Mutual funds are a type of financial intermediaries (Gordon, Sharpe, and Bailey, 2009). They obtain money from investors and use it to purchase financial assets such as stocks, bonds and money market instruments that constitute its asset mix (Chandra, 2008). Individual investors achieve many advantages by investing through mutual funds, namely the economies of the scale, diversification, liquidity and professional management.

Mutual funds, like any other financial intermediaries perform several economic functions such as risk reduction through diversifications, lower cost of contracting and processing information, professional portfolio management, liquidity, variety and payment mechanism (Fabbozi and Modigliani, 2002). A mutual fund share represents a proportionate ownership of all the underlying securities in the fund, allowing investors to spread their money over many more securities than one person could typically put together in a portfolio. A mutual fund is more diversified than a typical individual's portfolio, thereby reducing investor's comparative risk and, consequently increasing their comparative return. The amount of capital needed to obtain this diversification is too large for the average individual investor (Kohn, 2009). Besides, mutual funds can achieve economies of scale in trading and transaction costs, economies unavailable to the typical individual investor. Moreover, mutual funds allow individuals to earn a certain return without needing to constantly monitor the market (Fabbozi and Modigliani, 2002).

The number of mutual funds grew substantially in United State (US) from 1980s. At the end of 2005, the combined assets of U.S. mutual funds approached \$9 trillion, up from \$370 billion in 1984, while the number of individual funds grew from 1,200 to almost 9,000 over the same period (Bliss, Potter, and Schwarz, 2008). This reflects that

investing public relies on non-bank financial institution and increased sophistications of investors in terms of their knowledge of and appreciation for alternatives to commercial bank services (Johnstone *et al*, 2010).

In Kenya, the mutual fund industry did not take off as early as in other developed countries. However, according to Capital market authority (CMA) investor education handbook (2010), the number of unit trust grew from virtually zero in 2001 to eleven in 2008 while the asset portfolio had grown by an average of ksh.1.9 billion annually to Ksh.17.6 billion in the past 9 years .These unit trust included African Alliance unit Trust, 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, Dyer and Blair Unit Trust Scheme and Standard unit Trust Scheme. The number as at 2010 that was in operation and making the necessary reporting were only eight excluding CFC unit trust, Dyer and Blair and Standard unit trust.

There were three types of unit trust in Kenya, namely Equity funds, money market and blended funds. Equity funds have an objective of maximizing returns in the long run. To achieve this, it is fully invested in shares listed on Nairobi security exchange (NSE) and selected shares in the regional market. It is diversified across all the sectors of the equity market and is suitable for investors with long-term horizon. Money market and income securities are intended for the stability of the capital. It is invested in treasury bills and short-term bonds. It is also diversified across securities and is ideal for investors with a short-term horizon. Blended fund is a blend of the two above and is intended for the stability of both capital and its growth. It is suitable for investors with medium term outlook. Despite this sharp growth in both the number and the net asset value of unit trust in Kenya, very little academic research has been devoted to examining their performance.

2.0 Literature Review

The study draws most its theories from economics. Assets or securities are priced using various models. Sharpe (1964) developed Capital asset pricing model (CAPM) in order to show the pricing of the assets (Bhalla, 2002). This model uses government Treasury bill as a proxy for risk free rate, systematic risk and a market index as returns from the market. The model is used to find the relationship between the risk of assets and its expected returns. Most of the models of performance measures are based on capital asset pricing model.

The study also uses the theory of Portfolio optimizations. It involves the selection of securities to be included in the portfolio and the determination of portfolio funds in each security (Jones, 2010). Markowitz (1952) developed the theory of portfolio analysis that provides the basis for scientific portfolio construction that result in efficient portfolio. He examines the problem of finding the portfolio with the maximum expected return for a given level of risk. That is, the combinations of risk and returns of the portfolio to predict efficient and inefficient portfolios (Varian, 1993). The goal of portfolio managers should therefore be to minimize portfolio risk for any levels of expected returns (Bhalla, 2002). His tasks therefore were to translate security performance to portfolio performance and to select efficient portfolios among large numbers that were available. The task of the individual investor was to select desirable portfolio from efficient ones based on his risk profile (Varian, 1993).

The lesson drawn from this theory is that different funds have different degrees of risks and returns due to intentional or unintentional predictions. In addition, holding mispriced securities or undiversified portfolio could lead to poor performance. Therefore, Alpha, beta and R squared that were used in performance evaluation were derived from Markowitz theory of portfolio construction. The empirical findings on fund performance are mixed. Gruber (1996) finds using a four-factor model, that fund underperforms by 65 basis points per year. Since the average expense ratio in his sample is about 113 basis points per year, this implies that mutual funds earn positive risk-adjusted returns, but charge the investors more than the value added.

On the other hand Wermers (2000) carried out a research on mutual funds' performance in America and found that funds hold stocks that outperform by market 1.3 percent per year, but their net results underperform by one percent. Out of this 1.6 percent is due to expense and transaction costs. Taib and Isa (2007) researched on Malaysian unit trust aggregate performance over the period 1991-2001 by employing different performance

measures. Their results show that on average, the performance of Malaysian unit trust falls below market portfolio and risk free returns. However, the variance of unit trust monthly returns is less than the market. Performance by type of funds indicates that bond funds show relatively superior performance, over and above the market and equity unit trusts.

Arugaslan, Edwards and Samant (2008) used 50 US based international mutual funds to evaluated Risk-adjusted performance of international mutual funds during1994-2004. Their empirical results show that the funds with the highest average returns may lose their attractiveness to investors once the degree of risk embedded in the fund have been factored into the analysis. Conversely, some funds, whose average (unadjusted) returns do not stand out, may look very attractive once their low risk is factored into their performance.

More recently, Thanou *et al.*, (2008) researched on mutual fund evaluations during up and down market conditions in Greek equity mutual fund. Their objective was to check both risk adjusted performance and timing abilities of Greek fund managers. They used monthly returns of 17 equity mutual funds for the period January 1997 to December 2005 by using Greece index of Athens as a benchmark. Their finding was that the mutual funds in the industry evidenced satisfactory diversifications. Polwitoon and Tawatnuntachai (2005) used 188 US-based global bond funds that survived during the period of 1993-2003 and found that Global funds also provide incremental diversification benefits to equity fund investors.

3.0 Methodology

3.1 Research Design

The study employed descriptive research design. The population of the study constitutes all the mutual funds in Kenya during the period 2005 to 2009. According to investor education book 2010, there were only eleven unit trusts. The sources of information were therefore all the fund managers of these unit trusts. The location of the study was Nairobi business district (CBD) where all the funds were located. The data collected was both qualitative and quantitative in nature and were collected from each respondent. The research used both the primary and secondary data. The primary data was collected by use of questionnaires and structured interviews with fund managers. Secondary data was also used to supplement primary data. The secondary source about monthly data was requested from fund managers.

3.2 Sources of Data and Data Collection Method

Various monthly data pertaining to the unit trust performance covering from January 2005 to December 2009 was collected from the fund managers and business daily newspapers. Return of 20 NSE share Index is taken to serve as a benchmark for the market portfolio while 60-day Kenya government Treasury bill was used as a proxy for risk free rates. Both the primary and secondary data was used. The primary data was collected by use of a structured questionnaire and interviews of the fund managers. The primary data was used because it is unique and has not been used before. As a source of a secondary data, the monthly returns for each scheme, calculated from the daily net asset value of each fund was obtained from their data base.

Questionnaire was used because most of the time, fund managers who were busy are allowed to take time in answering the questions. Again, personal biases are removed. Interviews were also used because sometimes questionnaire may be misunderstood by the respondent and therefore requires clarification or even to reduce refusal rate.

3.3 Data Analysis

The fund performance was measured using various standard performance measures developed by Sharpe (1966), Treynor (1973) and Jensen (1967) to measure performance as follows:

3.3.1 Measures of Performance

The research used various standard performance measures namely Sharpe, Jensen's Alpha, and Treynor Index. The formulas to compute the performance of mutual funds, market index and risk free returns were as follows:

$$s_{p} = \frac{rp - rf}{\sigma p} \qquad (1)$$

$$T_{p} = \frac{rp - rf}{\beta} \qquad (2)$$

$$\alpha_{j} = rp - rf = \alpha p + \beta p (RM - RF) + \varepsilon p \qquad (3)$$

Where R_f = computed yearly average 60 day Kenya government risk free rate.

R_p=is the average (portfolio) return for individual fund.

 σ_p is the standard deviation or total risk of the individual portfolio of the fund. This measures the riskiness of the fund. The higher the standard deviation, the higher the risk.

 β_p is the measure of systematic risk and hence shows whether the fund is aggressive or defensive. A beta of greater than 1 shows the fund is aggressive.

 ε_p is the error term that shows nonsystematic risk.

 R_{m} is the market index. The NSE 20 share index is taken as a proxy for the market.

 α is a Jensen alpha which shows whether or not the funds outperformed the market index.

The Sharpe measure represented by Sp in equation (1) shows whether or not the fund is preferable. The higher the value, the more the fund is preferable. Jensen measure represented as αj in equation (2) shows whether or not the fund is diversified. It is also important in evaluation of the forecasting ability of fund managers.

The αj (intercept) represents the average incremental rate of returns on the portfolio per unit of time. It will be positive if the fund managers have forecasting ability and vice versa. The model assumes random error is equal to zero and a randomly constructed portfolio is expected to have zero αj Treynor Index represented by (Tp) in equation (3) shows whether the funds' performance is superior or inferior to the market index on a risk adjusted basis. This model differs from Sharpe Index because Treynor Index (Tp) uses systematic risk instead of standard deviation of mutual funds return.

Jensen performance criterion, like the Treynor measure, does not evaluate the ability of portfolio managers to diversify, since the risk premiums are calculated in terms of β . Alpha and beta used by Treynor and Jensen are the standard method for assessing the performance of a fund relative to a benchmark.

The Sharpe ratio and Treynor measure is usually desirable to calculate for the set of portfolio being measured(Jones, 2004). This is because the choice depends on definition of risk. If the investor likes to use total risk, Sharpe ratio is appropriate while if he uses systematic risk, Treynor measure is appropriate. This imply that investors who invest in a portfolio of securities are interested in Sharpe ratio because it assesses the portfolio return in relation to total risk while those who have a numerous other investment but the portfolio constitute relatively one small part of their total assets, systematic risk becomes relevant and therefore Treynors measure is useful. The research therefore employed all the three performance measures.

4.0 Findings

4.1 Descriptive Statistics

This section gives the qualitative results of the data collected through questionnaire and interviews. Out of eleven mutual funds in Kenya, only seven were found to be in existences for a period of over one year. The fund managers who responded to the questionnaire only 42.9% have worked for over 5 years while 57.1% only worked for the companies for less than five years. This result is as shown in Table 1.

Table 1: Fund managers duration of employment

	Frequency	Percent
Less than 5 years	4	57.1
More than 5 years	3	42.9
Total	7	100.0

The above finding reveals the experience in the management of fund. The percentages of experienced fund managers are below the average. 71.4% of the manager had undergraduate qualifications while 28.6% had professional qualifications and 42.9% of these managers are below the ages of 30 years while 57.1% are between the ages of 30-50 years old. This result reflects the qualification and risk profile of fund managers. The majority of fund managers do not hold professional qualification.

The funds are generally young and all are affiliated to financial institutions as shown in table 2.

Table 2: Age of mutual funds

	Less than 3 years	More than 3 years
Money market	20%	80%
Equity	25%	75%
Blended	40%	60%

The above table shows that 20% of the money fund are in existence for less than 3 years while 80% were in existence for over 3 years, 25% of equity and 40% of blended were in existence between less than 3 years while 75% and 60% were in existence for over 3 years, respectively.

The 50% of the managers manage load fund while 50% are no load fund. According to the fund managers, the client on average understands the financial market. The understanding was 42% poor and 57.1% not very well while the money market is 100% not very well as revealed by Table 3.

Table 3: Clients understanding of financial market

	Frequency	percent
Not very well	3	57.1
Poorly	4	42.9
Total	7	100.0

In determining the importance of information in mutual funds investment, it was found that performance ranking was 14.3% extremely important 57.1% very important and 28.6% important, recommendation by business associates was 57.1% extremely important, while books newsletter was 42.9% less important, 28.6% important

and 28.6% extremely important. Newspapers, magazines, and use of financial advisors were found to be 57.1% and 71.4% extremely important respectively. Of all these sources, use of financial advisors was found to be effective followed by advertisement in newspapers and magazines books or newsletter and recommendation of business associates. These results are as shown in Table 4.

Table 4: Importance of information source in fund investment

	Not at all important	Less important	Important	Very important	Extremely important
Performance ranking			28.6%	57.1%	14.3%
Recommendation by business associates			28.6%	14.3%	57.1%
Seminars		42.9%	28.6%		28.6%
Recommendation by business associates		14.3%	28.6%		57.1%
Advertising in newspapers and magazines	14.3%	28.6%			57.1%
Advertisement in radio and TVs	28.6%	42.9%	14.3%	14.3%	
Financial advisors	28.6%				71.4%

In order to ascertain how frequent the fund managers advise their clients, Table 5 provides the findings:

Table 5: Frequency of advising clients

	Many times	Sometimes
Money market	100%	
Equity		100%
Blended	16.7%	83.3%

It was found that they advise them many times for money market that is, 100%, sometimes for equity, that is 100% and 16.7% many times and 83.3% sometimes for blended,

4.2 Performance of Equity Fund over the Period 2006 – 2009

The performance data for 2005 was unavailable for the existing funds and therefore the periods of the study were adjusted from 2006 to 2009. During the year 2006, there were only three funds trading in equity namely Omk, Britak and CBA. The number grew to four with addition of four funds that included African alliance in 2007, to six in 2008 with addition of ICEA and Suntra and finally to seven with inclusion of CFC. The market had a positive return of 3% while all the individual funds had a positive but lower return compared to the market. Omk had 2.8%, followed by Britak 2.3% and CBA 2.1%. These summaries along with the risks were provided in Table 6.

Table 6: Returns, Risk (beta and standard deviation) and R² for equity fund for 2006-2009

	2006				2007				2008				2009			
Funds name	g.	δ _P	Вр	R ²	R _P	δ _P	Вр	R ²	R _P	δ _P	Вр	R ²	R _P	δρ	βь	R ²
OMK	0.020896	0.029697	0.858206	0.3413423	0.000965	0.031368	0.760944	0.4255207	-0.024	0.060325	-0.2037	0.0169858	0.005083	0.079934	-0.11791	0.012495
BRITAK	0.023766	0.027388	0.617746	0.1652401	0.007476	0.029604	0.608825	0.1653656	-0.01678	0.128118	0.202197	0.5412408	0.008057	0.077625	-0.1439	0.017035
СВА	0.028069	0.025984	0.842372	0.7453904	0.001041	0.027229	0.645971	0.2333381	-0.02678	0.061755	-0.02643	0.0596266	0.00111	0.078515	-0.03367	0.00094
Suntra									-0.01811	0.079147	0.038919	0.0025098	0.004357	0.047148	0.13625	
ICEA									-0.02648	0.057674	0.360337	0.1169776	0.006343	0.068076	-0.14104	0.012618
Dyer Blair									0.00974	0.0586730	-0.08099		0.007117	0.063077	-0.10981	
Africana					0.020747	0.039437	0.129783	0.0284203	-0.01598	0.052414	-0.00414	0.0043754	0.004228	0.037155	0.320097	0.007059
CFC													-0.00633	0.014699	1.09055	

In 2007, all the funds had positive returns. However, in 2008, all the funds had negative returns except Dyer and Blair that began trading in equity and earned a positive return of 0.9%. All the funds had positive returns during

2009 except CFC, which started trading in that year and earned a negative return of 0.633%. Britak had the highest positive return of 0.81% while CBA had the least positive return of 0.11%.

The risk of the fund as measured by standard deviation show that in 2006 the market had a higher standard deviation of 4.005% while the individual funds had lower standard deviation of 3.0% for CBA, 2.7% for Omk and Britak with 2.6%.

In 2007, African Alliance had the highest standard deviation of 3.94% followed by Omk with 3.137%, then Britak with 2.96% and finally CBA with 2.723%. %. During 2008, the market had standard deviation of 7.887% which was higher than those of individual funds except Britak, that had standard deviation of 12.812%, and Suntra with 7.915%, Dyer and Blair had least standard deviation of 5.241%. Finally, in 2009, the market index funds had a standard deviation of 9.5% against the riskiest Omk with 7.99% and CFC with the lowest standard deviation of 1.47%.

CBA had a higher positive beta of 0.86 followed by Omk with 0.84 and finally 0.62 for Britak in 2006. During 2007, the Omk had the highest positive beta of 0.761 then CBA with 0.646, Britak with 0.609 and finally African alliance with 0.13. The entire firm had negative Beta except ICEA with 0.4706 and Britak with 0.2022 in 2008.

In 2009, CFC started trading in equity fund and was the most volatile investment with a beta of 1.09 and hence most aggressive. All the other funds except Dyer and Blair and Suntra, which are relatively young, were less aggressive as they also had positive betas but less than one. R² is a coefficient of determination, which was obtained by squaring the correlation coefficient. If the fund is fully diversified, coefficient of determination will approach 1.0, indicating that funds returns are completely explained by markets return. The lower the coefficient of determination, the less the portfolios return is attributable to the market return, indicating that other factors, which are diversified away, are allowed to influence portfolio returns.

In 2006, CBA was more diversified than other funds. It had a coefficient of determination of 0.75 compared to Omk that had 0.34 while Britak had 0.17. However, Omk surpassed CBA in 2007 with a coefficient of determination of 0.45 against CBA with a coefficient of 0.23. More new funds started trading in 2008 included ICEA and Suntra .Britak was more diversified than all the funds trading in 2008 with a coefficient of 0.54 followed by ICEA with R² of 0.11. In 2009, all the funds were poorly diversified with most diversified fund being ICEA with a coefficient of 0.0126.

The Sharpe ratios for 2006 show that all the funds had negative returns with Britak 1.71, CBA 1.59 and Omk with an index of 1.46. In 2007, the Sharpe performance Were all-negative. CBA had the highest negative Sharpe of 2.5 while African alliance had lowest negative Sharpe of 1.198 as summarized in Table 7.

Table 7: Treynor, Sharpe and Jensen measure for equity fund

ame	2006			2007			2008			2009		
Funds name	T _P	Sp	JA	T _P	Sp	J _A	T _P	Sp	JA	T _P	Sp	JA
OMK	-0.04755	-1.46255	-0.00842	-0.08807	-2.13639	-0.06701	0.485904	-1.64081	-0.12081	0.582283	-0.85895	-0.07759
BRITAK	-0.07181	-1.70716	0.022059	-0.09938	-2.04377	-0.0605	-0.45382	-0.71625	-0.0701	0.456479	-0.84619	-0.07658
CBA	-0.05503	-1.59036	-0.015	-0.10362	-2.45831	-0.06694	3.849682	-1.6479	-0.1046	2.157489	-0.92507	-0.07518
Suntra							22.51205	-1.24475	-0.09354	-0.21676	-1.47164	-0.05631
ICEA							1.67628	-1.75922	-0.06285	0.477878	-0.99005	-0.07808
Africana				-0.36393	-1.19765	-0.04723	1.123098	-1.55036	-0.09964	0.633016	-1.10205	-0.07783
Dyer and Blair							-0.28156	-1.17625	-0.06107	-0.48899	-1.79314	-0.04514
CFC										-0.07342	-5.44738	0.002526

The Sharpe ratio for 2008 and 2009 were all-negative implying that it did not outperform the market. Britak was the only fund, which had a positive Jensen alpha of 0.022 in 2006. All the other funds that included Omk and CBA had negative alphas of 0.0084 and 0.015 respectively.

Treynor measure show that all the funds had negative excess return on the portfolio for the period 2006 and 2007. In 2008, all the funds earned positive excess returns except Dyer and Blair and Britak, which had negative returns. Suntra had the highest excess returns of 22.5 while Omk had the least positive excess return of 0.4. Finally, Suntra, Dyer and Blair and CFC had negative excess returns while CBA had the highest excess return of 2.16.

Britak was the only fund, which had a positive Jensen alpha of 0.022 in 2006. All the other funds that included Omk and CBA had negative alphas of 0.0084 and 0.015 respectively. The Jensen Alpha for all the funds were negative for all the years 2007, 2008 and 2009 except CFC which had a positive alpha of 0.0025.

5.0 Discussion Conclusions and Recommendation

5.1 Discussion

Majority of the fund managers do not have adequate experience and professional qualification that would have enabled them to improve fund performance. Almost half of fund managers were youthful implying their risk profile. Young managers take higher risks than old managers do. This is reflected in the investment style where the fund managers in money market were all conservative but aggressive and liberal in equity and blended fund respectively. At least all the funds however young they were, traded in money market.

However, this contradicts the finding by Chevalier and Ellison (1999) who examined the relationship between performance and the manager's age, the average composite SAT score at the manager's undergraduate institution, and whether the manager has an MBA and found that managers who attended higher-SAT undergraduate institutions have systematically higher risk-adjusted excess returns.

As majority of the managers do not have adequate skills, the performance tends to lag behind. This supported by Chang et al (2007) using a total of 73 Taiwanese executive MBA students with an average of 12-17 years' work experience in their study found both the moral reasoning level of the managers and an adverse selection condition affect a manager's project evaluation decisions significantly.

All the funds on average performed poorly against the market index during the study period. This meant a lower systematic and unsystematic risk on average against that of the market. However a different finding was made in the study by Lai and Siok-Hwa (2010) who examined the performance of 311 mutual funds from January 1990 to December 2005 in Malaysia by using composite portfolio performance measures and found evidence that mutual fund performances yield superior returns with relatively lower systematic risks. The result of the study show that on average, the performance of mutual funds falls below market portfolio. This finding was consistent with studies by Shah, Hijazi and Hamdani (2005) that show the funds outperformed the market as revealed by Jensen alpha while Sharpe shows that no funds were preferable. According to them, Mutual Fund industry's Sharpe ratio is 0.47 as compared to market that is 0.27 risk premium per one percent of standard deviation. Results of Jensen differential measure also show positive after cost alpha. Hence, overall results suggest that mutual funds in Pakistan are able to add value. Whereas results also show some of the funds under perform, these funds are facing the diversification problem.

The inferior risk adjusted performance measures was in agreement with findings by Taib and Isa (2007) who studied Malaysian unit trust aggregate performance. Similar results were obtained by Shah, Hijazi and Haman (2005) who found on overall basis that, funds industry outperformed the market proxy by 0.86 percent.

5.2 Conclusions

The objective of the study was to measure the performance of equity mutual funds in Kenya for the period January 2005 to December 2009. For the five-year period, the mutual funds performed no better than the market on a risk-adjusted basis using various performance measures. The funds were neither preferable nor outperform the market. Further, there were no portfolio diversifications as shown by lower coefficient of determination. However, the individual funds risks were generally lower compared to that of the market as measured using standard deviations and beta. This was consistent with many other empirical findings. Therefore, it was not clear why the funds grew both in asset size and number yet the performance of the funds were not impressive as it generally did not beat the market. It was seen that fund management despite its growth was seen as a back office function, a staff function, or a reporting function by financial institutions.

5.3 Recommendation

It is therefore recommended that the financial institutions should view fund management as a profit Centre and put it on an independent basis so as to enhance its growth. Similarly, there were many investors whose funds could be pooled so as to realize full advantages of funds management but may not be so due to the problems of information asymmetry. The study therefore recommends outreach activities by mutual funds so as to enlighten investors on its advantages. The study recommends a further research to find other factors that facilitated the growth of the funds in the said period.

References

Abdullah, F., Hassan, T. and Mohamed, S. (2007). Investigation of performance of Malaysian Islamic unit trust fund: comparison with conventional unit trust fund. *Journals of Managerial finance*, **33** No 2 pp142-153.

Arugaslan, O., Edwards, E. and Samant, A. (2007). Risk-adjusted performance of international mutual funds. *Managerial Finance*, **34**(1), pp 5–22. doi:10.1108/03074350810838190.

Arugaslan, O., Edwards, E. and Samant, A. (2008). Evaluating large US-based equity mutual funds using risk-adjusted performance measures. *International Journal of Commerce and Management*, **17(**1/2), pp 6–24. doi:10.1108/10569210710774721.

Athanasios, G. N., Papanastasiou, J. A. and Lazaridis, J. (2005). Performance of Mutual Funds. *Journals of Managerial finance*, **31** No 2 pp102-112.

Bhalla, V. K. (2002). Portfolio analysis and management, S. Chand & Company Itd, New Delhi.

Bauman, W. Scott and Robert, E. M. (1995). "Portfolio Perfonnance Rankings in Stock Market Cycles," *Firiancial Analysts Journal*, March-April, pp 79-87.

Chandra, P. (2008). Investment analysis and portfolio management 3rdeditionMcGraw-hillNew Delhi.

CMA (2010), Investors handbook, Kenya.

Corrado, C. J. and Jordan, B. D. (2005). *Fundamentals of investments: valuation and management*. Boston: McGraw-Hill/Irwin.

Droms, W. G. and Walker, D. A. (2001). Mutual fund investment performance. *Global Finance Journal*, **12**, pp 237–248.

Fabozzi, (2002). Foundations of Financial Markets & Institutions, 3/E. Pearson Education.

Friend, I., Blume, M. and Crocket, G. (1970). Measurement of portfolio performance under uncertainty. *American Economic Review*, **60**, **pp** 561–575.

Gordon, A. J., Sharpe, W. F. and Bailey, J. V. (2009). Fundamentals of Investments. Prentice Hall.

Grinblatt, M. and S. Titman, (1994), a study of mutual fund returns and performance evaluation techniques. *Journal of Financial and Quantitative Analysis*, **29**, pp 419-444.

Halla, V. K. (2005). Investment Management: Security Analysis and Portfolio management 12th edition S. chand and company New Delhi.

Huhmann, B. A. and Bhattacharyya, N. (2005). Does mutual fund advertising provide necessary investment information? *International Journal of Bank Marketing*, **23**(4), pp 296–316.

Huij, J. and Derwall, J. (2007). 'Hot hands' in bond funds, Journal of Banking and Finance32 (2008), pp 559-572. Jensen, Michael C., (1968), The performance of Mutual funds in the period 1945-64. *Journal of Finance*, **23**, pp 389-416.

Jones, C. P. (2004). Investments: analysis and management (9th ed.). New Delhi: John Wiley & Sons.

Kahn, R.N and Rudd, A., Does Historical Performance Predict Future Performance?. *Financial Analysts Journal*, **51**, No. 6, pp 43-52.

Kohn, M. G. (1994). Financial institutions and markets. McGraw-Hill Ryerson, Limited.

Kothari, S. P. and Warner, J. B. (2001). Evaluating mutual fund performance The Journal of Finance LVI, 5.

Lehmann, B. N. and David, M. M. (1987). "Mutual Fund Performance Evaluation: A Comparison of Benchmarks and Benchmark Comparisons." *Journal of Finance*, **42**, pp 233-265.

Madura, J. (2003). Financial Markets and Institutions, 6th Edition, South Western.

Malkiel, B. G. (1995). "Returns from investing in equity mutual funds from 1971 to 1991. *Journal of Finance*, **50**(2), pp 549-572.

Markowitz, H. (1952). "Portfolio Selection." Journal of Finance, vol. 7, no. I (March), pp77-91.

Miller, E. M., Prather, L. J. and Mazumder, M. I. (2008). Cross-autocorrelations among asset classes: Evidence from the mutual fund industry. *Managerial Finance*, **34**(11), pp 756–771.

Mukherji, S. (2011). The Capital Asset Pricing Model's Risk-Free Rate (SSRN Scholarly Paper No. ID 1876117). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=1876117.

Noulas, A. G., Papanastasiou, J. A. and Lazaridis, J. (2005). Performance of mutual funds. *Managerial Finance*, **31**(2), pp 101–112.

Polwitoon, S. and Tawatnunchai, O. (2006). Diversification benefits and persistence of US-based global bond funds. *Journal of Banking & Finance*, **30**, pp 2767–2786.

Pandey, I. M. (2010). Financial management (10th ed.). New Delhi: Vikas Publishing House.

Pastor, L. and Robert F. S. (2002b). Mutual Fund Performance and Seemingly Unrelated Assets. *Journal of Financial Economics*, **63**, pp 313-349.

Ramasamy, B. and Yeung, M.C.H. (2003). Evaluating mutual funds in an emerging market: factors that matter to financial advisors. *International Journal of Bank Marketing*, Vol. **21** (3), pp 122-36.

Ruckman, K. (2003). Expense ratios of North American mutual funds. *Canadian Journal of Economics/Revue canadienne d'économique*, **36**(1), pp 192–223.

Sharpe, W. F. (1966). "Mutual fund performance", Journal of Business, Vol. 39, pp 119-38.

Sondhi, H. J. and Jain, P. K. (2006). Are equity investments well-timed? A study of timing parameters of equity mutual funds in India. *Journal of Advances in Management Research*, **3**(1), pp 17–25.

Sorros, J. N. (2003). Return and risk analysis: a case study in equity mutual funds operating in the Greek financial market. *Managerial Finance*, **29**(9), pp21–28.

Strench, B. L. (2008). SEC proposes guidelines for directors overseeing mutual fund portfolio trading. *Journal of Investment Compliance*, *9*(4), 27–32.

Swinkels, L. and Rzezniczak, P. (2009). Performance evaluation of Polish mutual fund managers. *International Journal of Emerging Markets*, **4**(1), pp 26–42.

Taib, F. and Isa, M. (2007). Malaysian unit trust aggregate performance. *Journals of managerial finance*, Vol no.**33**, pp 102-121.

The Kenya gazette (April 2010). Republic of Kenya gazette notice, No.4770, Volume CXII No.45.

Treynor, J. L. (1965). How to rate management of investment funds. Harvard Business Review, 63–75.

Wermers, R. (2000), "Mutual fund performance: an empirical decomposition into stock-picking talent, style, transaction costs, and expenses", The Journal of Finance, Vol. **55**, pp 1655-95.

Wu, C.-R., Chang, H.-Y., & Wu, L.-S. (2008). A framework of assessable mutual fund performance. *Journal of Modelling in Management*, **3**(2), pp 125–139.