Available online at www.worldscientificnews.com

World Scientific News

WSN 45(2) (2016) 111-125 EISSN 2392-2192

The Market Timing Skills of Fund Managers in Less Developing Economies (A Case of Equity and Blended Funds in Kenya)

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ABSTRACT

This paper evaluates the market timing of equity and blended mutual funds in Kenya for the period 1st January 2006 to 31st December 2009. The objective of the study was to examine fund managers' market timing skill .The research was motivated by the fact that there is limited research on market timing skills of fund managers in less developed economies such as Kenya. The target population was all mutual funds in Kenya. The research used secondary source to collect data which included mutual funds daily returns and annual reports for the period 2005 to 2009. The data was used to calculate the net asset value and hence market timing skills of mutual funds in Kenya. The market timing skills were calculated by models developed by Treynor and Mazuy (1966). Using year by year basis, only blended funds show market timing effort as shown by positive market timing coefficient as compared to equity funds. However, the general finding was that all the market timing skills of fund managers were not significant. The implication is that the fund managers in Kenya have no market timing skills over the research period.

***Keywords*:** mutual funds; market timing; NAV

1. INTRODUCTION

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, 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, 2002)

For mutual funds to be successful, professional fund managers should be able to earn above average returns through successful securities analysis. However, there is a challenge to pick mispriced securities into the portfolio in order to earn excess return for the investors. The excess return is earned when the individual portfolio has higher return than that of the aggregate market which acts as a benchmark. The magnitude of returns so generated from mutual funds are affected by many factors such as ability of market timing, managerial skills, marketability, liquidity, time horizon, risk, global issues, population, and fund expenses.

The advantages of mutual funds led to worldwide mutual funds industry to grow significantly during 1990s. This was due to a shift by individual investors from real estate and tangible assets to financial assets, increase of such investors to preferences to indirect ownership of stock and bonds through mutual funds and the growth of tax deferred investing for retirement through pension plans which were used to own mutual funds (Fabbozi, 2002)

The number of mutual funds grew substantially in the United States of America (USA) 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 the investing public relies on non-bank financial institutions and increased sophistications of investors in terms of their knowledge of and appreciation of alternatives to commercial bank services (Johnston & Carnes 2010).

In Kenya, the mutual fund industry did not take off as early as in developed countries. According to Capital market authority (CMA) investor education handbook (2010), there were eleven unit trusts as at 2010 with an average value of Ksh.17.6 billion. These 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 trusts 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, they are fully invested in shares listed on Nairobi Security Exchange (NSE) and

selected shares in the regional market. They are diversified across all the sectors of the equity market and are 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.

In order to examine the market timing skills of fund managers, a model developed by Treynor and Mazuy (1966) was used. The study therefore tested the hypothesis that Funds managers' possess market-timing skills.

1. 1. Literature review

The relevant theoretical and empirical literature on market timing is as discussed below:

1. 1. 1. Asset pricing theories

Assets or securities are priced using various models. Sharpe (1964) and Litner (1965) extended the Markowitz model to Capital Asset Pricing Model (CAPM) in order to show the pricing of the assets (Bhalla, 2002). This model uses government Treasury bills as a proxy for risk free rate, systematic risk and a market index as returns on the market portfolio. The model is used to find the relationship between the risk of assets and its expected returns. According to CAPM, the expected return on the portfolio is positively and linearly related to the market portfolio. This relationship between the return of the portfolio and that of the market is referred to as security market line (SML). The model is given by the following equation:

$$ER_j = R_f + \beta_\rho \left(R_m - R_f\right)$$

where:

ER_J is the expected return on asset or portfolio,
R_F is the risk free rate of return;
R_M is the returns on the market portfolio. In Kenya, this is measured in terms of the returns from Nairobi security exchange
$\beta p = covariance\ (p, m)\ /\ \delta 2m$ is the systematic measure of portfolio or security risk.

1. 1. 2. Market efficiency

Fama (1970) developed Capital Market Theory, as an extension of Portfolio Theory developed by Markowitz (1952). A capital market is either efficient or inefficient. An efficient Capital Market requires that in setting the prices of securities at any time $_{t\ -\ 1}$, the market correctly uses all available information. Sharpe (1974) argues that in a perfectly efficient market, any attempt to obtain performance superior to that of the overall market portfolio taking into account both risk and return by picking and choosing among securities would fail. That is, security prices fully reflect all available information. Information is therefore, a key issue of the efficient market concept (Jones, 2004). Market therefore, responds very quickly to new information affecting the value of the securities. If trades were made at prices that reflect full information, the market is over efficient, which means, it is so

well informed that it cannot compensate the information-gathering function, a clearly unstable condition (Ippolito, 1989). Malkiel (1995) argues that in an efficient financial market, no investors are allowed to earn above-average returns without accepting above-average risks.

According to efficient market hypothesis, active portfolio management is a wasted effort and unlikely to justify the expenses incurred making it the best strategy. It therefore, makes no attempt to outsmart the market but only aims at establishing a well-diversified portfolio of securities without attempting to find over or under priced stocks (Bodie, Kane, Marcus and Mohanty, 2002). The goal of performance measure is to rank managers by the accuracy of their private information on future asset returns. However, this may bring a problem of risk-aversion of the fund manager.

The implication of the theory to this research is that if the market is efficient, no investor can earn abnormal return. The portfolio managers are expected to select a well-diversified portfolio providing the systematic risk level that the investor wants. Therefore, this makes the market timing skills of fund managers a wasted effort.

1. 1. 3. Market timing models

The investment manager who hopes to outperform his competitors usually expects to do so either by the selection of securities within a given class or by the allocation of assets to specific classes of securities (Sharpe, 1975). Market timing involves shifting funds between a market index portfolio and a treasury bill (Bodie et al, 2002). According to Elton and Gruber (2013), timing involves a fund manager changing the sensitivity to a factor over time in response to changes in the manager's belief about the return on that factor in the next period. According to Balsmeier and Broussard (2003), Market timing involves shifting funds between a market index portfolio and a safe asset such as treasury bills or money market funds depending on whether the market as a whole is expected to outperform the safe asset. The two best known approaches of measuring timing ability are quadratic equation model proposed by Treynor and Mazuy (1966) and Dummy variable regression as proposed Henriksson and Merton (1981) as discussed below:

1. 1. 3. 1. Quadratic Regression

Treynor and Mazuy (1966) proposed a model of measuring market-timing skill of fund managers. This is given as:

$$R_p - R_f = \alpha + \beta_j (R_m - R_f) + c (R_m - R_f) + \mu_p$$

where:

R_p is the portfolio return,
R_F is the risk free rate of return as measured using short term government security such as treasury bill;
R_M is the returns on the market portfolio. In Kenya, this is measured in terms of the returns from Nairobi security exchange
$R_m - R_f$ represents the excess return from the market over risk free rate
$R_p - R_f$ is the excess return of the individual portfolio over the risk free rates.
β_j is the loading on factor j.
C is the coefficient measuring manager's ability to time the market movement

α_p is the expected return for portfolio p generated from the manager's selectivity skills.

If c turns out to be positive, there is an evidence of timing ability and if vice versa if c is negative.

α, β_j and c are estimated by regression analysis.

1. 1. 3. 2. Dummy Variable Regression

Henriksson and Merton (1981) proposed a methodology that takes two values of portfolio Beta; that is, a high value if the market is expected to do well and a small value otherwise. This is expressed in form of a regression model as:

$$r_p - r_f = \alpha + \beta (r_m - r_f) + c (r_m - r_f) D + \mu_p$$

where:

D is a dummy variable that equals one (1) for r_m which is greater than r_f and zero otherwise.

Therefore, the beta of the portfolio is β in bear market and $\beta + c$ in bull market.

This study employed a model developed by Treynor and Mazuy (1966) to establish the evidence of market timing by fund managers in Kenya as the model by Henriksson and Merton also could yield the same result.

1. 1. 4. Empirical Literature on Market Timing

Jensen (1969) who researched on risk, the pricing of capital assets, and the evaluation of investment portfolios documented the earliest empirical evidence on market timing. He evaluated the portfolio of 115 mutual funds in the period 1945-1964 and found that fund managers on average are unable to forecast future security prices. This led to the conclusion that the strong form of martingale hypotheses holds; that is, the current prices of securities completely captures all available information. This meant that the fund managers do not earn abnormal returns because of successful market timing.

Similar findings were made by Williamson (1972) who researched on measurement and forecasting of mutual funds performance over the period 1961-70. Out of 180 funds studied, none gave evidence of successful forecasting of the market, but four gave significant evidence of unsuccessful forecasting. That is, they tended to become more volatile before a market decline and less volatile before a market rise.

In a different study, Romacho and Cortez (2006) found that managers do not display selectivity and timing abilities, and there is even evidence of negative timing. Furthermore, they noted a distance effect on stock selection performance, since fund managers who invest locally appear to outperform those who invest in foreign markets. However, this effect reverts with respect to the market timing skills of fund managers, indicating that international fund managers are more focused on market timing strategies.

In addition, Filippas and Psoma (2001) evaluated the performance of Equity Mutual Fund Managers in Greece. They applied Treynor and Mazuy model on 33-equity mutual fund to evaluate the fund managers' ability to time the market and select undervalued securities. Their findings do not reveal any ability of the Greek managers to time the market correctly or select undervalued securities.

Benson and Faff (2003) also analyzed the performance of a sample of Australian international equity trusts over the period 1991-1999 using monthly data in order to examine selectivity and timing performance for a surviving sample and two alternative non-surviving samples. They found that funds are unable to time the market and that there is an inverse relationship between market timing and selectivity measures.

In addition, Low (2007) used 40 Malaysian unit trust funds to evaluate the performance during up and down market conditions; specifically selectivity and timing performance of fund manager by employing Jensen's model and Henriksson and Merton's model. The findings indicate that, on average, the funds display negative overall performance and there is little variation in the manager's market timing and selectivity performance across alternative market benchmarks. Further, manager's poor timing ability contributes significantly to the fund's negative overall performance.

Swinkel and Rzezniczak (2009) also looked at performance evaluation of polish mutual funds managers. They used monthly mutual fund returns over the period 2000-2007 to investigate the manager's selectivity and market timing skills. It analyzes three mutual fund investment categories: equity, balanced, and bond mutual funds. The findings were that for each of the three categories, equity, balanced, and bond funds; there was positive, but insignificant selectivity skill of the mutual fund managers. No evidence was found of bond or equity market timing skills in the sample.

The recent findings by Chen, Ferson and Peters (2010) who also evaluated the ability of bond funds to market time nine common factors related to bond markets. They found that controlling for the non-timing-related nonlinearity is important, funds' returns are more concave than benchmark returns, and this would appear as poor timing ability in naïve models. However, with controls, the timing coefficients appear neutral to weakly positive and after adjusting for nonlinearity, the performance of many bond funds is significantly negative on an after-cost basis, but significantly positive on a before-cost basis.

Finally, most recently, Kaushik, Pennathur and Barnhart (2010) looked at market timing and the determinants of performance of sector funds over business cycle for the period 1990 to 2005.They used single factor, five-factor conditional and five-factor unconditional models to estimate the initial results for market timing of sector funds across the business cycle. Monthly data such as returns, Fama and French factors, and fund specific variables of sector funds from January 1990 to December 2005 were used to estimate initial and cross-sectional results. Sector funds demonstrate positive timing ability during recessions and negative timing ability during expansions when using the S&P 500 as the benchmark, but this timing ability disappears when sector specific benchmarks are used.

However, Bello and Janjigian (1997) examined the market timing and security-selection performance of mutual funds. They used an extended version of Treynor-Mazuy model to examine the market-timing and stock-selection abilities of 5,732 domestic equity mutual funds included in Morningstar's Mutual Funds. They found positive and significant market timing abilities for 633 mutual funds during the 1984-94 periods.

Busse (1999) who looked at timing in mutual fund with evidence from daily returns also made similar finding. He found the evidence of market timing in estimating the returns of mutual funds that led to higher risk-adjusted returns.

1. 2. Data and methodology

The monthly data pertaining to seven mutual funds for which net asset values were available over the period from 1st January 2006 to 31st December 2009 was collected from the funds database and annual reports available in the business daily newspapers and in some cases from fund managers themselves. The period was chosen because it was the period when the mutual funds in Kenya experienced rapid growth in both the number and the asset value. The Return of 20 NSE share Index was taken to serve as a benchmark for the market portfolio while 91-day Kenya Government Treasury bill was used as a proxy for risk free rates. Since the Treasury bill rate is an annualized holding period return, it is converted to 91 day rate as follows:

$$i_{T-bill}(dy)\frac{P_F - P_o}{P_F} x \frac{360}{h},$$

where:

$i_{T\text{-}bill}$ = Annualized yield on the T-bill
P_F = price (face value) paid to the bill
P_o = Purchase price of the T-bill
h = Number of days until the T-bill matures

The monthly return for both the individual funds and the market were calculated using the following equation:

$$R_t = \frac{NAV_t - NAV_{t-1}}{NAV_t}$$

where:

R_t is the monthly individual funds returns for both equity and blended, NAV_t is the succeeding net asset value of each fund while NAV_{t-1} is the proceeding net asset value for each fund.

This returns are then used measure the market timing skill of fund managers. The research therefore adapted the model developed by Treynor and Mazuy (1966). This model is specified as follows:

$$R_p - R_f = \propto_p + \beta_p (R_m - R_f) + c (R_m - R_f)^2$$

where:

R_p - R_f is the excess return of the portfolio over risk free rate and represents a dependent variable.

α, β and c is estimated by use of multiple regression analysis. An α is alpha of the portfolio and measures whether or not the managers can outperform the market, β is the beta coefficient or slope of the first independent variable and measures volatility or aggressiveness of fund managers while c is the coefficient of the second independent variable which measures market timing and selectivity skill of fund managers. If c is positive, there is evidence of market timing ability.

α, β and *c* were tested at 5% levels of significance using a t statistic. If α is positive and significantly different from 0, we identify selection skills, and if c is positive and significant, the fund manager possesses market timing ability.

2. RESULTS

As shown in Table 1 below there were only three funds namely OMK, Britak and CBA which traded in equity during 2006. The alphas for all the funds were negative implying that none of them performed better than the market on a risk adjusted basis. Britak had the largest negative alpha of 0.037 while OMK had the smallest negative alpha of 0.02633.The betas for all the funds were all positive. Britak had the highest beta of 0.829, followed by OMK with a beta of 0.759 and finally CBA with a beta of 0.581. The timing coefficient for all the funds was all positive except CBA, which had a negative coefficient of 2.57. Britak, had the highest coefficient of 7.19 and OMK with 4.69.

In 2007, African alliance also started trading in equity fund. All the equity funds had negative alphas except CBA, which had a positive alpha of 0.005. Britak had the largest negative alpha of 0.08 while OMK and African alliance had the least negative alphas of 0.12 each. Apart from CBA, which had a positive beta of 0.196, all the other equity funds had negative betas with the largest negative with African Alliance having 3.38, then OMK with 3.37 and Britak with 0.97. OMK was the only fund with the highest positive market timing coefficient of 26.17 while all the other funds had negative coefficient with CBA with least negative coefficient of 0.67 followed by Britak with coefficient of 10.23 and finally African alliance with 26.179 respectively. However, the timing coefficients for the entire fund were not significant at 5% levels.

Table 1. Managers market timing skill for equity fund from 2006-2009.

	2006						**2007**					
	Coefficient			**p-value**			**Coefficient**			**p-value**		
	α	β	C	α	β	C	A	β	C	α	β	C
QEMK	-0.026	0.759	4.687512	0.034959	0.116321	0.39408	-0.12123	-3.37833	26.1791	0.403862	0.527438	0.497823
Britak	-0.036	0.82911	7.188519	0.007782	0.091956	0.206264	-0.06967	-0.97814	-10.2333	0.110698	0.496189	0.297979

Year	Statistic	Parameter	ICEA	Africa	CB A	Britak	QEMK	ICEA	Africa	CB A
2008	Coefficient	α	-0.0853	-0.04188	-0.11825	-0.08919	-0.12604			-0.030
		β	0.171892	0.414387	-0.24628	-0.34005	-0.34968			0.580
		C	0.091919	0.208316	-0.27095	-0.59676	-0.34171			-2.56578
	p-value	α	0.040009	0.009482	0.008254	0.074717	0.00562			0.095351
		β	0.658012	0.008901	0.490989	0.452152	0.331804			0 .348476
		C	0.787628	0.090403	0.393195	0.151861	0.284514			0.847619
2009	Coefficient	α	-0.07426	-0.07383	-0.07453	-0.07478	-0.07642		-0.12123	-0.04855
		β	-0.63483	-0.56263	-0.64296	-0.7179	-0.64091		-3.37833	0.196012
		C	-2.75098	-2.55602	-2.9528	-3.02167	-2.72201		-26.1791	-0.67986
	p-value	α	0.011214	0.006576	0.031761	0.021786	0.026309		0.403862	0.263522
		β	0.089583	0.09359	0.169205	0.095657	0.153615		0.527438	0.892871
		C	0.066758	0.059645	0.107539	0.078921	0.12851		0.497823	0.94465

At 5% levels of significant

In 2008, ICEA was also added to the list of funds trading in equity. All the funds had negative alphas African alliance having the least negative alpha of 0.04, then ICEA with alpha of 0.085, Britak with 0.089, CBA with 0.118 and finally OMK with 0.12. All the funds also had negative betas except African Alliance, which had a positive beta of 0.414 and ICEA with 0.172. All the equity funds also had negative market timing coefficient except African Alliance and ICEA with a positive coefficient of 0.2083 and 0.09 respectively. Africa alliance had the least negative timing coefficient of 0.27, followed by OMK with 0.34 and finally Britak with 0.59. However all were not significant at 5%.

In 2009 also, all the funds had negative alphas and betas. African alliance had the least negative alpha of 0.07383, followed by ICEA with 0.07426, then CBA with 0.07453, Britak with 0.07478 and finally OMK with 0.07642. Again, African alliance had the least negative beta of 0.562, followed by ICEA with 0.634 then OMK with a beta of 0.640, CBA with 0.642 and finally Britak with 0.717. The market timing coefficient was also negative for all the funds. African alliance again had least negative market timing coefficient of 0.059,followed by ICEA with 0.066, Britak with 0.078 , CBA with 0.107 and finally with OMK with the highest negative marketing coefficient of 0.12. However, all the alpha, beta and market timing coefficient were not significant at 5%. Generally, the equity fund managers did not possess the market timing skills over the study period.

Generally, the equity fund managers did not possess the market timing skills over the study period as shown by the finding in Table 2 below:

Table 2. Overall market timing skills of equity fund managers.

	Estimate	**Std. Error**	**t value**	**Pr(>|t|)**
Intercept (α)	-0.06931	0.00589	-11.77638	0.00000
rm_rf (β)	-0.99832	0.06515	-15.32403	0.00000
rm_rf2 (c)	-0.08590	0.06164	-1.39348	0.16482

As shown in Table 2 above, the overall equity market timing coefficient was -0.085. However, this was not significant at both 5% and 10% levels as the p value was 0.16 which is greater than acceptable 0.05.

Table 3 below also shows the market timing skills of blended funds. During the period 2006, only two funds namely OMK and Britak consistently traded in blended. Unlike equity funds, the blended funds for 2006 had positive alphas. Britak had the highest positive alpha of 0.041 while OMK had negative alpha of 0.0401. The two funds however, had positive betas of 0.47 and 0.17 for Britak and for OMK respectively. The market-timing coefficient for Britak was a positive of 2.66 while that of OMK was negative of 0.792. However, both were not significant at 5% levels of significance.

In 2007, two more funds started trading in blended fund namely Zimele and African alliance. All the funds had negative alphas with OMK having the least negative alpha of 0.04, followed by African alliance with 0.051, then Zimele with 0.057 and finally Britak with 0.059. However, the betas and timing coefficients for all the funds were positive except Zimele which had a negative market timing coefficient of 0.02. African Alliance had the

highest beta of 0.631, followed by Zimele with 0.376, OMK with 0.356 and finally Britak with 0.253. African Alliance, similarly, had the highest market timing coefficient of 4.16 followed by Britak with 1.52 and OMK with 0.95. However, the market timing coefficients were all not significant at 5% level. This implies that none of the funds performed better than the market as measured by alphas. Again, all the funds were defensive as measured by betas of less than one.

Table 3. Managers market selectivity skill for blended fund from 2006-2009.

	2006						**2007**					
	Coefficient			**p-value**			**Coefficient**			**p-value**		
	α	β	C	α	β	C	A	β	C	α	β	C
QEMK	-0.10896	-0.24962	-0.25537	0.002725	0.36311	0.294686	-0.04717	0.35644	0.952108	0.10611	0.707389	0.880923
Britak	-0.04099	0.471367	2.655153	0.000241	0.120818	0.441204	-0.05936	0.252977	1.516861	0.243683	0.88268	0.895174
CB A							-0.05126	0.630899	4.159384	0.196478	0.604585	0.631293
Africa							-0.0574	0.375921	-0.02049	0.559709	0.921352	0.999403
ICEA												
	2008						**2009**					
	Coefficient			**p-value**			**Coefficient**			**p-value**		
	α	β	C	α	β	C	α	β	C	α	β	C
QEMK	0 .10896	-0.24962	-0.25537	0.002725	0.36311	0.294686	-0.07397	-0.43273	-2.13707	0.004499	0.158171	0.086732

Britak	-0.09424	-0.17773	0.18416	0.010677	0.551253	0.484992	-0.06846	-0.19464	-1.02435	0.000525	0.322916	0.19734
CB A	-0.08716	0.03768	-0.0272	0.001338	0.844184	0.871993	-0.06605	-0.26993	-1.48573	6.88E-05	0.078954	0.022204
Africa	-0.15576	- 0.43047	-0.39732	0.001182	0.220134	0.200626	0.072391	1.005284	0.056808	3.33E-1 4	5.61E-14	0.146472
ICEA	-0.07595	0.126698	0.095928	0.004496	0.560596	0.616463	-0.07032	-0.33681	-1.81168	0.000904	0.138085	0.054092

At 5% levels of significant

In 2008, all the funds had negative alphas, betas and market timing coefficients except ICEA that had positive betas of 0.127 and market timing coefficients of 0.096. However, all these were not significant at 5% levels.

Similarly, the entire fund in 2009 had negative alphas, betas and market selectivity coefficients except zimele, which had a positive alpha of 0.072, a positive beta of 1.005, and a positive market-timing coefficient of 0.0568. However, it was only African Alliance, which had a significant negative market-timing coefficient at 5% levels.

The overall market timing result for blended fund is as shown in Table 4 below:

Table 4. Overall market timing skills of blended fund managers.

	Estimate	**Std. Error**	**t value**	**Pr(>|t|)**
Intercept (α)	-0.07520	0.00476	-15.80698	0.00000
rm_rf (β)	-0.01341	0.05067	-0.26463	0.79156
rm_rf2 (c)	-0.05409	0.04777	-1.13223	0.25886

Like equity funds overall market timing result, blended fund also had a market timing coefficient which was not significant at both 5% and 10% levels. This finding therefore accepts the hypothesis that the fund managers do not possess the market timing skills.

2. 1. Discussion of Findings

The fund managers over the sample period did not have market timing skills. This finding is consistent with that of Jensen(1967) who found that mutual fund on average were

not able to predict security prices well enough to outperform a buy-the-market-and-hold policy and also that there is very little evidence that any individual fund was able to do significantly better than that which we expected from mere random chance. Shah et al (2005) also documented that investors invest in the market very defensively as evident from their beta. Kaushik et al (2010), who studied market timing and determinants of performance of sector funds over the business cycle, found that sector funds exhibited negative timing ability across all stages of business cycle.

The result is also consistent with findings by Filippas et al (2001). They evaluated the ability to time the market and select undervalued securities of Greek equity mutual fund managers. Their findings do not reveal any ability of the Greek managers to time the market correctly or select undervalued securities.

The same result was also obtained in the study carried out by Swinkels et al (2009) on performance evaluation of polish mutual funds managers. They found that there was no evidence on equity market selectivity and timing skills in the sample. The study by Chang and Lewellen (1984) and Low (2007) also confirms that there is little variation in the manager's market timing and selectivity performance across alternative market benchmarks. They also reported that a manager's poor timing ability contributes significantly to the fund's negative overall performance. Baum and Farrelly (2009), Butler, Grullon, Weston (2005), Carhart (1997) and Jiang (2003) obtained still similar results and more recently, Cici and Gibson (2012) also found that bond fund managers, on average, cannot select superior bonds.

However, this finding slightly contradicts the studies by Lee and Thaler (1990) which indicated that at the individual fund level, there is some evidence of superior micro and macro forecasting ability on the part of the fund manager. In addition, Chen et al (2010) more recently found the timing coefficients to range from neutral to weakly positive. After adjusting for nonlinearity, the performance of many bond funds is significantly negative on an after-cost basis, but significantly positive on a before cost. In addition, Hallahan and Faff (1999) who examined market timing ability of a segment of the Australian investment fund industry found little evidence of market timing ability.

3. CONCLUSIONS AND RECOMMENDATIONS

The study sought to establish the market timing skills of fund managers. Like many other empirical findings, mutual funds managers do not have market timing skills as demonstrated by either negative or lower timing coefficient. Equity and blended funds were tested and it was found that there were no attempts of stock selectivity skills. This implies that any outperformances by fund managers are due to luck and not any other skill. The study therefore does not violates the believe in efficient market hypothesis

The study recommends areas that need to be investigated further. The finding that performance was not the indicator of growth requires a further research to establish factors that caused the growth in mutual funds. The study is to be carried out on the effect of recent government regulation of unit trust on its performance, the impact of outreach activities by the funds on its performance and the adoption of county government on the performance of mutual funds in Kenya.

Investors must be mindful of the following caveats while weighing up the empirical evidence: First, the performance measures for the funds in Kenya may have been mainly

affected by political factors. The choice of the period fell in 2007 when the country had a general election followed by post-election violence in 2008. This may have not given the true performance of the funds as compared to findings by others in other parts of the world.

Secondly, whether a particular fund outperformed the market or not could be attributed to a mere chance. This is because the market is assumed to be efficient implying that all the fund managers can access the same set of information. However, it may be argued that the fund size is likely to be the main factor in influencing the performance due to reduction in cost per unit of the fund due to economies of scale.

Finally, the study sought to establish the performance of mutual funds in Kenya over a five year's period using NSE as a benchmark. Since the Kenya mutual funds are in rapid growth stage, many of them have a short age. There were only two funds which recorded five years of age. This created a bias towards more recently established mutual funds in the study.

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(Received 11 March 2016; accepted 25 March 2016)