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Equity Investments, Bond Investments and Financial Performance of Collective Investment Schemes in Kenya

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Abstract

The collective investment schemes in Kenya have witnessed increased volatility in their earnings, resulting in irregular growth in the industry. This necessitates the need to understand the factors contributing to poor financial returns from collective investment schemes. Hence this study sought to investigate the effect of equity investments and bond investments on Kenyan CIS's performance. The specific objectives were: To assess the effect of equity investments, bond investments on financial performance of collective investment schemes in Kenya. The study was anchored on: modern portfolio theory and the efficient market hypothesis. The positivism philosophy was applied, with the firms adopting an explanatory research design. The target population was 17 Collective Investment Schemes registered by the Capital Markets Authority and were operational in the period 2010 to 2018. Secondary data was sought from the Capital Markets Authority Annual reports and from the respective websites of the CIS'. Data was analyzed using descriptive statistics, correlational analysis and panel regression analysis. Hypotheses were tested at a significance level of 0.05. Findings indicate that equity investment, bond investments have an insignificant effect on CIS' return on assets. Further, equity investments had a positive and significant effect on liquidity whereas bond investments had an insignificant effect on liquidity. The study recommends that CISs actively revise their equity investments and bond investments to stimulate financial returns.

Keywords: Equity investments; Bond investments; Liquidity; Return on Assets; Collective Investment Schemes

JEL Classifications: G17; G21

Introduction

The Assets Under Management (AUM) worldwide by various investment management professionals grew to US \$ 76 trillion in 2013 from under US \$ 60 trillion in 2000 (IMF, 2015). This represented over 100% of global Gross Domestic Product (GDP) and about 40% of global financial assets. Investment management by professional managers', accounts for less than half of all the available financial assets (Fanta & Makina, 2017). According to KPMG (2013) the continent has atleast 951 registered unit trusts as at the end of 2012. According to the latest statistics by Forbes Alexander, South Africa witnesses a 6% growth on total assets. The World Bank Prospects show a 4.4 % growth rate in 2013 and projected a 4.9% increase by 2014. The analysis shows an estimated increase of 5.2% and 5.4% in 2014 and 2015 respectively (Dawe, 2016).

According to Capital Markets Authority (2017) published financial results for 13 asset managers out of 16 licensed by the CMA to run collective investment schemes show that total assets under management rose by 24% to Sh29 billion in 2012 from Sh23.4 billion in 2011. This was majorly boosted by share price gains at the NSE. The financial sector of any country is critical nerve center for economic growth and development (Icharia, 2014). Investment groups within the developing economies have become a key component of enhancing wealth accumulation as well as stimulating an investment culture hence their financial soundness is critical to capital accumulation as well stimulating economic development (Gumbs, 2010; Iraya & Wafula, 2018).

Rasch and Birkinshaw (2012) posit that to increase performance of pure-stock portfolios, it is necessary for investors to incorporate diverse strategies such as covered-call writing, securities investment, bond investments and protective-put buying. Mwangi (2018) concluded that effective construction of portfolios in a mix of different assets classes i.e. bonds, securities and alternative investment vehicles positively affect firm performance. Chepkorir (2018) indicated that investment in government bonds, equity and treasury bills positively enhanced firm financial performance.

Icharia (2012) affirms that modern investors, rather than buy shares at the NSE, have diversified their investment and now make investments in real estate, import and export business and construction among other opportunities. The investor analyses his constraints within the available framework before formulating the objectives. The investment portfolio in the study was assessed using equity investments, bond investment and money market investment (Choi, Fedenia, Skiba, & Sokolyk, 2017). For each of the different investment choice, the study employed a ratio of the specific investment made on an investment tool against the total investments made by the firm within a financial year (Investment Company Institute, 2015).

Gathenya (2015) describes equity investments as the portion of money invested within a firm through the purchase of the firm's shares. The investments in equities within the course reflects the daily trading in company stocks. Mbogo, Aduda, and Mwangi, (2017) indicates that most firms trading within the NSE are more attracted to stocks trading owing to their attractiveness to the majority of individual and corporate investors. Company shares are more liquid and thus more attractive to investors not seeking to hold a long position within the exchange market (Bessler, Opfer, & Wolff, 2017).

Investment in bonds has become a key investment alternative to many investors since they provide a predictable income stream, they are a method of preserving capital since the principal amount is always repaid and they can offset the volatility that equities/stocks hold (Wangari, 2015). In line with the quarter two bulleting by the Capital Markets Authority (2018) the secondary debt market in Kenya experienced a minimal increase in the bond market of 4.06% trading 158.52 billion shillings against a 152.34 billion trading in quarter 1 of 2018. This indicated an increasing appetite among individual and corporate investors in the bond market. Further the reports indicate there was an overall 71.24% acceptance in the three (3) new Treasury bond issues and one (1) year bond issue by the government which raised 63.11 billion shillings.

Financial performance measures the results of the policies and operations undertaken by a firm and expresses the results in fiscal terms (Erasmus, 2008). Financial performance has been calculated using ratio analysis and assessed by analyzing trends to determine the future financial performance estimates. This ratio analysis involves different financial performance areas such as profitability, total asset value and liquidity. These performance calculating tools used are derived from the information available in the periodic financial reports (Babalola, 2013). The current study assessed the financial performance based on the profitability and liquidity.

Capital Markets Authority (2010) reports on the performance of investment schemes indicated assets under management by 17 collective investment schemes stood at 55.8 billion shillings. Among these the money market funds accounted for 77.61% of the total assets. Equity funds controlled 11.84% of the funds, 6.94% was controlled by balance funds while fixed income/bonds fund accounted for 2.65% of the funds. The report further showed that 73% of the funds were under management by the top five funds. Data from the Capital Markets Authority (2018) indicates between 2017 and 2018, funds held by Equity investment bank unit scheme fell by 57.48%, British American Unit trust scheme dropped by 16.97%, Old mutual unit Trust scheme dropped by 7.03%. The only unit schemes to record a growth in their funds were CIC unit scheme to stand at 26.92%, ICEA Lion 10.46% and CBA unit trust 7.29% of the total funds under management. Despite the dip in the financial performance of the above CIS there is inconclusive evidence indicating the effect of equity investments, bond investments on the Financial Performance of collective Investment Schemes in Kenya making this study key in filling this knowledge gap.

Kimani and Aduda (2016) looked at portfolio size and profitability of Kenyan investment firms and found that stock portfolio then bonds and money markets produced the best returns. Kimeu (2015) investigated portfolio composition and returns of NSE-listed investment firms and found that bond investment, real estate and equity positively affected fiscal performance. The reviewed empirical evidence focused on investment companies. Due to the exceptional differences of investment companies and CISs, the findings of these studies cannot be replicated to collective investment schemes. Further lack of empirical evidence the effect of equity investments, bond investments on the financial performance of Kenyan CIS formed a good basis of this study. Hence this study investigated the effect of equity investments, bond investments on the financial performance of collective Investment Schemes in Kenya.

The study sought to test the following null hypotheses:

H01: Equity investments do not significantly affect financial performance of collective investment schemes in Kenya.

H02: Bond investments do not significantly affect financial performance of collective investment schemes in Kenya.

Literature Review

Advanced by Markowitz, portfolio theory (1952; 1959) research works. Many researchers posit that the investment strategy proposed by the Modern Portfolio Theory (MPT) is a direct contradiction to the traditional stock picking (Shefrin & Statman, 2000). This theory was conceptualized by economists understood elements of the market as a whole, as opposed to business analysts who identify the most unique aspect of each investment opportunity (Patricia & Oluwatobi, 2005). The expected short-term volatility and expected long-term return from investments matter to the investor (Amin & Harry, 2003). The main criticism of this theory is that the investors look at the value regeneration rather than no the wealth regeneration. However, MPT and Capital Asset Pricing Model (CAPM) have now been developed fully and have provided researchers with a theoretical framework whose application could meet the challenges associated with measurement of performance of investment firms. Francis and Kim (2013) indicate that the number of investment alternatives is overwhelming. Portfolio managers are now able to build on the theoretical tenets of MPT to build a portfolio with the best asset choices. The current study utilized on the assumption of the MPT as framework for examining the effect of equity investments, bond investments on the financial performance of collective Investment Schemes in Kenya.

Advanced by Fama (1970), the efficient market hypothesis holds that beating the market is impossible since the stock market's efficiency will always change the existing share prices and incorporate all the relevant market information. The theory holds that stocks will always trade at their fair values and investors will never trade in undervalued or overvalued stocks within the market. This makes outperforming the market through expert stock selection next to impossible and to achieve high returns, investors have to purchase riskier investments (Makovský, 2014). The theory was more so relevant since it helps in explaining stock market performance by examining the nexus between efficiency and the price of shares. This theory was integral in examining how equity investments selection in a portfolio influence the fiscal results of Kenyan CIS.

Empirical Literature

Empirical evidence on investment portfolio and financial performance in Kenya have produced mixed results. Ilo, Yinusa, and Elumah, (2018) studied mutual fund performance and concluded that lack of skilled portfolio selection led to poor mutual fund performance in Nigeria. These studies were however not conducted within Kenyan context hence its findings may fail to represent the Kenyan market. For instance, Iraya and Wafula, (2018), on examining how portfolio diversification impacts performance of Kenyan mutual funds found that unsystematic risk positively affected mutual fund performance indicating that lower diversification resulted in higher financial performance. There is substantial empirical evidence examining how investment portfolio affects financial performance of investment schemes. Choi, Fedenia, Skiba, and Sokolyk (2017) in their study on portfolio concentration indicate that concentrated investment strategies yielded the highest returns to investors. Kimani and Aduda (2016) focused on portfolio size and profitability among Kenyan investment firms and found that stock portfolio then bonds and money markets produced the best returns. Kimeu (2015) investigated portfolio composition and its impact on returns of NSE-listed investment firms and reported that bond investment, real estate and equity improve return generating capacity. The reviewed empirical evidence focused on investment companies. Due to the exceptional differences of investment companies and CISs, the findings of these studies cannot be replicated to collective investment schemes. As such the current study aimed at determining how equity and bond investments impact the performance of CIS firms in Kenya.

Ilo, Yinusa, and Elumah (2018) analyzed performance of Nigerian mutual funds obtaining data from 37 mutual funds in operation between 2012 and 2015. These companies used portfolios that were spread over six categories. The study aimed to evaluate fund managers' skills. The findings indicated that stock investment positively affected mutual fund performance. The study assessed Nigerian investments while this study focuses on Kenyan companies. Iraya and Wafula (2018) assessed how portfolio diversification impacted returns of balanced mutual funds in Kenya. Utilizing descriptive research design approach to analyze the weekly performance of 7 balanced mutual funds in 2013, portfolio diversification was determined by analyzing the level of Unsystematic Risk in Performance. Findings showed that unsystematic risk was positively related to returns among balanced mutual funds. The study failed to specifically indicate how equity investment influences CIS returns.

Kimani and Aduda (2016) studied effects of portfolio size on fiscal productivity of Kenyan investment firms, obtaining data from financial statements of 45 Kenyan investments firms over a five-year period with findings showing that the highest returns came from stocks portfolio, then bond and money market returns with real estate portfolios reporting the least profits. The study was based on investment firms while the current study examined how portfolio selection affects fiscal productivity of Kenyan CIS. Aroni, Namusonge and Sakwa (2014) examined how access to financial information influence the rate of investment in companies' shares. Retail investors were contacted for this survey. Primary data was gathered from 311 respondents randomly selected from 836 investors involved at the NSE at March, 2013. After application of descriptive and linear regressions, results indicated that financial information had significant and positive influence on investment decisions. The above studies however are focused on how investment decision is arrived at but fail to examine how investment in equities affected the financial performance.

Tebaldi, Nguyen, and Zuluaga, (2018) examined factors determining the financial health of emerging markets. The study focused on 31-developing countries from 1994-2014. The study purpose was to examine the determinants of the spread on sovereign governments bonds and they impact in the economic sector with findings showing limited increase in bond spreads post the financial crisis which positively impacted economic growth. The study focused on effect of sovereign bond on national economic aspects whereas current research assessed bond investment. Mengich, Kibati and Ragama (2018) examined effect of investment in corporate bonds on productivity of Kenyan banks. Adopting an ex-post facto research design involving 42 commercial banks, secondary data was sourced from audited accounts reports covering 2008-2017. Findings indicated that corporate bonds trading significantly affect the banks returns on asset. The study was based on banks as opposed to CIS firms in Kenya.

Wanyonyi (2018) studied how investment diversification affects financial results of NSE-listed agricultural firms, employing a descriptive research design and utilizing a census survey of the Kenyan listed agricultural firms. The research relied on panel data for the period 2010-2017. Findings indicated a positive association between bond investments, securities investment and profitability. The study was dependent on listed agricultural firms while this study examined CIS firms in Kenya. Fanta and Makina (2017) studied equity, bonds, institutional debt and economic growth in South Africa. The study relied on finance-growth nexus in

South Africa accounting for the role of bond markets, stock markets, and bank and non-bank financial intermediaries using a vector autoregressive technique. The study indicated that bank and non-bank institutions involved in the bond market play a major part in promoting South Africa's economic development. The current study however sought to examine how the bond market influences performance in Kenyan firms.

Methodology

The study adopted a positivism research philosophy. Saunders, Lewis, and Thornhill (2012) explain that in positivism, only observable phenomenon can produce credible data and while generating a research strategy for data collection, an existing theory is largely used in the development of a hypothesis. Positivism was ideal for this study since there is an assumed causal link between equity investments, bond investments and the financial performance of collective Investment Schemes in Kenya. Further, an explanatory research design was adopted since it is useful in bringing out the relationship between variables. This design is advantageous since it allowed the researcher to cost-effectively collect volumes of data from considerable population so as to examine how the equity investments, bond investments influence the financial performance of collective Investment Schemes in Kenya.

The target population was the 17 registered CIS in Kenya that were operational in the period between 2010 and 2018. The firms formed the unit of analysis for the current study. Secondary data is utilized when the researchers have limited time and resources (Johnston, 2014). Financial statements reported between 2010 and 2018 were the main sources of secondary data. The study utilized a data extraction form. It contained all the information on all the variables under consideration. The data was collected through adherence to a systematic process.

The research data was extracted from the CIS firms' financial statements and uploaded to Microsoft Excel. Further, calculations were conducted in the variables to ensure that a uniform measurement is adopted in the study. The data was then exported to Stata 15 which supported the analysis. The research applied both descriptive and inferential analysis techniques. Descriptive analysis for this study comprised of estimation of means, standard deviations and frequencies, panel regression analysis being the most suitable. Inferential analysis involved use of correlation and panel regression analysis. A panel regression model was developed to address analysis of time series and cross-sectional data. These results were then presented using figures and tables. The study sought to estimate the following regression model;

$$FP_{it} = \alpha + \beta_1 EI_{it} + \beta_2 BI_{it} + \epsilon_{it} \dots \dots \dots \text{Equation 3.1}$$

Where FP denotes financial performance measured by Profitability (Return on Assets) for CIS *i* at time *t*
i denotes the observation (CIS Firms) *i* = 1-----17
t is the time period *t* = 2010-----2018.
EI_{it} denotes Equity Investments of CIS *i* at time *t*
BI_{it} denotes Bond Investments of CIS *i* at time *t*
 β_1 - β_2 is coefficients
 ϵ - error term
 Additionally, the effect of equity investments and bond investments on returns of CIS was measured by Liquidity (current ratio)

$$FP_{it} = \alpha + \beta_1 EI_{it} + \beta_2 BI_{it} + \epsilon_{it} \dots \dots \dots \text{Equation 3.2}$$

Where FP is financial performance measured by Liquidity (current ratio) for CIS *i* at time *t*
i denotes the observation (CIS Firms) *i* = 1-----17
t is the time period *t* = 2010-----2018.
EI_{it} denotes Equity Investments of CIS *i* at time *t*
BI_{it} denotes Bond Investments of CIS *i* at time *t*
 β_1 - β_2 is coefficients
 ϵ_{it} is an error term

Results and Discussion

Descriptive Results

The study dwelt on 17 collective investment schemes in Kenya. However, due to limitations in accessing all the audited statements for the CIS firms in Kenya from the Capital Markets Authority, only data from 14 companies was applicable (82%).

Table 1: Descriptive Summary

Variable	Obs.	Mean	Std. Dev	Min	Max
Equity investments	125	7.908	0.857	5.184	8.956
Bond investments	125	6.091	2.432	0	9.004
Liquidity	125	0.382	0.253	0.01	0.988
Profitability	125	0.0588	0.198	-0.896	0.606

Source: Research Data (2021)

Table 1 Presents results which indicates that on average the firms held 7.908 million in equity investments with a maximum holding of 8.956 million and a minimum of 5.184 million. The standard deviation was 0.857 indicating moderate deviation in the allocation of investment funds to equity investments. The findings also indicated that the average bond holdings within the selected firms was 6.091million with a standard deviation of 2.432 which was an indication of a high spread in the allocation of investment funds to bonds within the CIS firms. The results findings also indicated that during the time under observation (2010-2018), the return on assets of the registered collective investment schemes in Kenya was on average at 5.88%, with the highest ROA recorded being 60.6%. The lowest ROA was -89.6%. The positive Return on Assets indicates the firms were on average profitable. The negative ROA indicated some firms recorded a decrease in profits. The study further examined the liquidity of the firms using the current ratio and the analysed results indicated that on average the firms had a liquidity of 0.382 within the study period. The lowest liquidity within the period was 0.01 with a standard deviation of 0.253, an indication of low spread in liquidity on average.

Correlation Results

The study applied correlation tests to establish the nature and strength of the relationship between independent variable and the dependent study variables. The correlation tests were conducted at 95% confidence level.

Table 2: Correlation Tests

	Return on Assets	Liquidity	Equity investments	Bond investments
Return on Assets	1.000			
Liquidity	-0.1038 0.2475	1.000		
Equity investments	0.0532 0.5541	0.1013 0.2590	1.000	
Bond investments	0.1135 0.2058	0.3467* 0.0001	0.4317* 0.0000	1.000

Source: Research Data (2021)

The first objective reviewed equity investments. The results indicated that equity investments had a weak, positive and insignificant effect on ROA ($r = 0.0532$, $\text{Sig} = 0.5541 > 0.05$) and liquidity ($r = 0.1013$, $\text{Sig} = 0.2590 > 0.05$). The second objective sought to establish the effect of bond investments, with findings indicating that bond investments had a weak, positive and insignificant effect on ROA ($r = 0.1135$, $\text{Sig} = 0.2058 > 0.05$), with a weak positive and significant relation with liquidity ($r = 0.3467$, $\text{Sig} = 0.0001 < 0.05$).

Specification Tests

A Hausman test was key in determining the most suitable adoptable model between the fixed and random effects model. The test uses a null hypothesis of the suitability of a random effect model. A Chi-square statistic p-value of the Hausman test greater than 0.05 implies preference of a random effect model (Torres-Reyna, 2007).

Table 3: Specification Tests

Model 1. Fitted for Return on Assets				
Variable	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b- V_B)) S.E.
Equity investment	-1.199034	-.8592153	-.3398182	.6340756
Bond investment	.6049617	.7787183	-.1737566	.1334993
Chi Sq. Statistics = 1.99				
Prob>chi2 = 0.5737				
Model 2. Fitted for Liquidity				
Variable	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b- V_B)) S.E.
Equity investment	7.284446	7.043355	.2410909	.4381418
Bond investment	-.5951007	-.483099	-.1120017	.0933647
Chi Sq. Statistics = 1.92				
Prob>chi2 = 0.5888				

Source: Research Data (2021)

The findings indicated that on both sets of the panel regression models the values of the Prob>chi2 values greater than 0.05 which led to the study adopting the random effects model in the two sets of the regression analysis.

Panel Regression

The study applied Hausman specification tests in determining between the fixed effects and random effects model. It was determined that the random effects model was more appropriate for adoption in the current study. The hypotheses of the study were to test whether equity investments, bond investments have an effect on the financial performance of collective Investment Schemes in Kenya.

Table 4: Effect of Equity Investments and Bond Investments on Return on Assets

Variable	Coefficient	Std. Error	Z	P> z
Equity investments	-0.859	1.779	-0.48	0.629
Bond investments	0.779	0.692	1.13	0.260
_cons	1.250	13.157	0.09	0.924
Weighted Statistics				
R-sq:		Number of obs =	125	
within = 0.0371		Number of groups =	14	
between = 0.0468		Wald chi2(3) =	4.73	
overall = 0.0395		Prob > chi2 =	0.1925	

Source: Research Data (2021)

The panel regression model sought to determine the effect of equity investments, bond investments on the return on assets of the CIS. The Wald chi-square statistic for this model was found to be 4.73 with a p-value of the of 0.1925. The p-value being greater than 0.05 implied that at 0.05 level of significance, we fail to reject the null hypotheses and hold that equity investments and bond investments has an insignificant effect on CISs' ROA. In Table 4.9, R –squared was 0.0395, indicating that 3.95% of the changes in the ROA of CISs are explained by the; equity investment, bond investment. The low r-square can be attributed to the selected individual independent variables not having a high explanatory power on firms' ROA.

The first hypothesis posited that equity investments have an insignificant effect on CISs' profitability. It was determined that equity investment has an insignificant effect on ROA ($P>|z| = 0.629 > 0.05$). Thus, the study fails to reject the null hypothesis. These results are contrary to Kimani and Aduda (2016) who revealed that

investment in stock portfolio significantly improved performance of Kenyan investment companies. Similarly, Kagunda (2011) also reported that equity-based allocations improve profitability.

The second hypothesis opined that bond investments have an insignificant effect on CISs' ROA. Results indicated that bond investment do not have a significant effect on ROA ($P > |z| = 0.260 > 0.05$). The study thus fails to reject the null hypothesis. These findings are inconsistent with earlier literature; Owusu, Appiah, Omari-Sasu, and Owusu (2016) who concluded that increased investment in government bonds was a significant predictor of returns to pension funds. Similar results were observed in the study by Wanyonyi (2018) that indicated investments in bonds significantly impact firm returns.

Table 5: Effect of Equity Investments and Bond Investments on Liquidity

Variable	Coefficient	Std. Error	Z	P> z
Equity investments	7.043	1.822	3.87	0.000
Bond investments	-0.483	0.693	-0.70	0.486
_cons	-18.077	14.168	-1.28	0.202
Weighted Statistics				
R-sq:		Number of obs	=	125
within = 0.1557		Number of groups	=	14
between = 0.0052		Wald chi2(3)	=	19.77
overall = 0.0377		Prob > chi2	=	0.000

Source: Research Data (2021)

The panel regression model sought to determine the effect of Equity Investments and Bond Investments on the liquidity of the CIS. The Wald chi-square statistic for this model was 19.77 with an associated p-value of the of 0.000. This rejects the null hypothesis and holds that Equity Investments and Bond Investments has a significant effect on CISs liquidity. The coefficient of determination ($R\text{-sq} = 0.0377$) which was statistically significant $\text{Prob} > \text{chi}^2 = 0.000 < 0.05$. This is an indication that 3.77% of the variations in liquidity of collective investment schemes is explained by the equity investment, bond investment. The low r-square can be attributed to the selected individual independent variables not having a high explanatory power on CISs liquidity. Thus, incorporating more predictor values could yield an improvement in the strength of the model. The first study hypothesis posited that equity investments do not have a statistically significant effect on CIS's liquidity. Findings show that equity investments positively and significantly affect firm liquidity, thereby rejecting the null hypothesis ($P > |z| = 0.000 < 0.05$). This implies that a unit increase in equity investment leads to increased liquidity. The results are familiar with observations made by Ilo, Yinusa, and Elumah (2018) that equity investments have a positive effect on the fund liquidity.

The second hypothesis opined that bond investments have an insignificant effect on CIS's liquidity. Findings show that bond investments have a positive but insignificant effect on liquidity (current ratio) ($P > |z| = 0.486 > 0.05$). The study thereby fails to reject the null hypothesis. These results are not consistent with Mengich, Kibati and Ragama (2018) found out that increased trading in corporate bonds significantly improved liquidity among banks.

Conclusions

The study concluded that equity investments have a weak link on explaining the profitability of the collective investment schemes. The findings also affirmed that equity investments have a positive significant effect on liquidity. The results indicated that an increase in the equity holding within the firm will result in improvements in the current ratio within the firm. The findings indicate that increased reliance on equity investments within the CIS will result in less interest charges from other forms of investments thus improving the firm liquidity position.

The second hypothesis sought to determine if bond investments do not have a statistically significant effect on profits. The results found that bond investments within the collective investment firms have an insignificant effect on ROA and the liquidity of Kenyan CIS firms. The results affirmed that increased utilization of bond investments resulted in more interest charges on the bonds accruing to the firms leading to reduced profit generating capability.

Recommendations

The study findings indicated that equity investments and bond investments had a positive and an insignificant effect on CIS's ROA. It also indicated a positive and significant effect on liquidity of the collective investment schemes. As such, recommendations were for fund managers to actively engage in more robust diversification policies that will help in strengthening the equity investments and bond investments choices within the firm. This can take into account emerging investment classes such as REITS, NEXT Derivatives and other technology-backed investments. This will inherently foster the financial outcomes of the investment schemes. Further, through aligning their investment strategies to the market, investment schemes will be able to mitigate systemic risk by optimizing their portfolios to various investment classes that offer better financial returns.

The findings established that equity investments had a negative insignificant effect on ROA and a significant effect on liquidity. As such, recommendations were for equity investments to be leveraged to help improve investment scheme returns. Fund managers have to actively review available equity investment options that can offer reasonable returns within the medium term. This will strengthen the firm's liquidity level and has potential to improve the return on assets in the long-term. Further, to foster their financial returns, investment schemes should consider investing in securities in other emerging countries with a vibrant capital market. This will ensure the firms are able to exploit the market opportunities and limit their exposure to changes within the local markets. The study findings also indicated that bond investments had an insignificant effect on ROA and liquidity of investment schemes. Recommendations were for the CISs to consider reviewing their bond investments. This will allow the firms to evaluate the returns from their bond investment and undertake investments within firms that offer better long-run financial returns. Further, the firms should explore options of investing in the new county governments bonds which can offer a new stream of returns that has not been tapped within the market.

The study results established there is a positive effect of investment portfolio on CIS profitability. Supported by the results, recommendations were for the Capital Markets Authority to rely on the findings of this study when developing benchmark guidelines on the minimum holding on various investment portfolios. This will ensure there are set regulatory requirements that will guide collective investment schemes in the management of their investors funds which can significantly improve the public confidence in the institutions and drive their financial performance. Further, the regulator can be able to develop new policies to guide the assets management within the collective investment schemes to ensure that public funds are well-protected and the firms achieve value in their financial performance.

Contribution to Knowledge

The results of this study are expected to bridge the knowledge gap and improve the available academic reference material on financial outcomes of Kenyan CIS. Secondly, most studies have only focused on profitability ratios when examining financial performance, this study however expanded on available empirical evidence by including liquidity metric as a financial performance measure. The collective investment schemes have also become an important industry within the financial sector thus examining their financial performance provides critical evidence to academics and general public on how various investments influence their results. The application of the theories was also enhanced as the findings supported theoretical literature.

Limitations

The study faced some limitations which are worth documenting. The study was limited to Collective investment schemes in Kenya which were in operation in year 2010 and 2018, during this period there is possibility of some CISs that were either not in existence or were commencing operations hence resulting to generation of unbalanced panels. Dependence on secondary data may have some undetected errors. Considering the above limitations, the study findings may have been made without the detection of such errors: this may affect the final outcome of the study. However, the study overcame this limitation by scrutinizing data for completeness and editing data for errors accordingly.

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