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## EFFECTS OF INVESTMENT STRATEGIES ON FINANCIAL PERFORMANCE OF PRIVATE EQUITY FUNDS INVESTING IN KENYA

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#### Abstract

Globally, private equity (PE) investing has evolved extensively to become a significant industry compared to the small niche market it used to be. It is considered to play a crucial role in the economy, by boosting innovation and growth in promising start-ups or expanding firms, as well as by fostering the restructuring of mature companies. Private equity has become an increasingly important alternative asset class for institutional investors as it may offer return as well as diversification benefits relative to traditional stock and bond market investments. This study sought to assess the effects of investment strategies on the financial performance of private equity funds investing in Kenya. The study targeted all the funds managed by the 20 private equity fund investment management companies in Kenva. The study adopted a descriptive survey research design. The study was carried out for a period of 5 years, starting from year 2013 to year 2017. Data was sourced from the reports and websites of the various fund management companies as well as from the CMA website and the NSE website. After collection of data and testing for reliability, the data was coded and analysed with the aid of the Statistical Package for Social Sciences (SPSS). Descriptive statistics and inferential statistics were used to establish the relationship between the variables. Linear regression was carried out to test the influence of the various investment strategies on the financial performance of the private equity funds. The study found that 79.8% of the financial performance of private equity funds investing in Kenya could be accounted for by leveraged buyouts, venture capital, and mezzanine financing. The study also revealed that there was a strong positive relationship between financial performance and leveraged buyouts, venture capital, and mezzanine financing. The study further revealed that leveraged buyouts significantly affected financial performance of private equity funds investing in Kenya.

**Key Words:** investment strategies, financial performance, private equity funds, Leverage Buyouts, Venture Capital, Mezzanine Financing

## Introduction

Globally, private equity (PE) investing has evolved extensively to become a significant industry compared to the small niche market it used to be (Cressy *et al.*, 2007). It is considered to play a crucial role in the economy, by boosting innovation and growth in promising start-ups or expanding firms, as well as by fostering the restructuring of mature companies (Davila *et al.*, 2003). It has been hailed as a new and efficient form of organisation that generates economic efficiencies through a superior governance framework. Private equity has become an increasingly important alternative asset class for institutional investors as it may offer return as well as diversification benefits relative to traditional stock and bond market investments. In fact, the market for private equity investments grew dramatically between 1998 to 2000 (Tuck, 2003).

According to the Modern Portfolio Theory (MPT), risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward (Kaplan & Schoar, 2005). The relationship between the portfolio company and a PE firm with regard to financing, governance and ownership is best expounded by the agency theory and the informational asymmetry.

In 2016 private equity firms invested close to 105 billion shillings into Kenyan businesses during the first eight months, with financial services sector attracting most of the deals. According to investment data by Burbidge Capital, the biggest deal was the purchase of Helios stake in Equity Bank for 23 billion shillings and Old Mutual 23 billion shillings purchase of a 60.7 per cent stake in UAP Holdings. During 2016 financial services sector emerged as the preferred investment destination for many private equity firms attracted by high returns and improved growth. In East Africa, Kenya remains the favourite investment destination for private equity snapping up 18 deals of the 25 deals that were on offer. Investors have particularly been attracted to the high returns offered by insurance and banking firms. This study sought to assess the effects of investment strategies on the financial performance of private equity funds investing in Kenya.

A private equity fund is defined as a collective investment scheme used to invest in various equity and debt in line with the specific investment strategy selected by the investment managers. Private equity firm's use various investment strategies which include leveraged buyout (LBO), mezzanine financing, venture capital (VC), buyouts investment and fund-of-funds investments. Venture capital describes early-stage investing where a fund invests in small businesses or start-up companies that demonstrate above-average growth potential. Portfolio companies in a VC fund can often benefit from the specialized skill sets and managerial expertise of the VC fund's managers. This strategy involves investing in a company based on the belief that its value will go up due to a specific anticipated event related to the company (Kaplan & Stromberg, 2009).

Leveraged buyouts occur when a private equity fund or company takes control of another company's assets and/or operations by purchasing a majority of the voting stock of the target company. A leveraged buyout (LBO) occurs when a considerable amount of the proceeds

used to make the purchase of the portfolio company's equity come from borrowed capital. In some cases, the acquiring body in an LBO may pledge the assets of the target company as collateral to secure the loan (Stromberg, 2007).

A buyout investment is the purchase of a company's shares in which the acquiring party gains controlling interest of the targeted firm. Buyout investments are prevalent both in the U.S. and Europe as well as in other locations such as Asia (Fraser-Sampson, 2011). Buyouts generally focus on established companies rather than on young businesses and often use debt and equity financing where the acquiring party will take a majority stake (Fraser-Sampson, 2011). Buyouts are generally larger than venture capital investments and true buyouts mostly control the company via the majority of the shares or voting rights and have usually only one round of financing (Haberich, 2009).

## **Research Problem**

Investing in an alternative asset class such as private equity is to improve the risk and reward characteristics of an investment portfolio, with the expectation that the asset will offer a higher absolute return whilst improving portfolio diversification (Bodie, Kane & Marcus, 2011).

In comparison with investing in more traditional securities such as public stocks or bonds, however, investing in PE funds is considered a complex task. This is due to their long-term and illiquid nature, as well as the noticeable lack of transparent and publically available information pertaining to PE funds (Tuck, 2013). Moreover, there are material variations in performance across PE funds, implying that while PE investing may generate excellent returns, investors could also face large losses (Phalippou & Gottschalg, 2013). Hence, a PE fund investor needs to have the ability (or luck) to select funds with the potential to deliver attractive returns.

Private equity investing (PE) has over the years experienced a rapid growth and has become a significant industry. Academic literature shows that there are many different strategies associated with private equity investments (Kiungu, 2012). The most common strategies include venture capital, leveraged buyouts, special situations and mezzanine financing (Murithi, 2012). Managers who specialize in some of these strategies may also target the application of their investment money and expertise over a number of different points in a company's life cycle. Such points might include early seeding, start-up, expansion or replacement capital (Deloitte, 2013).

Driessen, Lin and Phalippou (2012), studying a mix of US VC and BO funds, found that venture capital funds are associated with a high market beta while buyout funds show a low beta but no abnormal performance. Gottschalg (2009) who analyzed a unique dataset from a sample of 133 US buyout-based investments from 1984 to 2004 found a positive and significant alpha for buyouts i.e., buyout investments outperformed the S&P 500 during the period. Chen, Baierl and Kaplan (2012) examined 148 venture capital funds that had been liquidated between 1969 and 2000. They found an average annual return of 9.99%, with the highest annual IRR of 74% and the lowest of -72%. Ljungqvist and Richardson (2013) analyzed the cash flow data of a single large US private equity investor during the period

1981 to 2001; 85% of the firm's holdings were BO funds. The study found that private equity fund investments outperform the S&P 500 by six to eight percent and the NASDAQ Composite Index by roughly three to six percent.

Osano (2013) did a study on the effect of investment strategies on financial performance of investment funds in Kenya, the study found a positive relationship was established between ROA and the Predictor variables which were investment strategy, Leverage, Liquidity, age and size. Gatauwa (2014) did a survey of Private Equity Investments in Kenya; the findings showed that banks and development financial institutions are the top investors in private equity funds. Most of the studies in this area have focused on the European market and the American Market. There is scanty empirical evidence on the effects of investment strategies on the financial performance of private equity funds in Kenya. This study sought to fill the existing research gap by answering the following research question: What are the effects of investment strategies on the financial performance of private equity funds in Kenya?

# **Research Objective**

To determine the effects of investment strategies on the financial performance of private equity funds investing in Kenya

# Value of the Study

The findings of this study will be significant to the management of private equity fund investment companies in that they will get to understand the effect and implication of investment strategies on fund performance. The findings of this study will also be significant to private investors as they will be able to understand the effect of investment strategies adopted on performance of private equity funds and therefore be able to identify those that may offer maximum return to their investments.

The findings of this study will be significant to academicians in that it will add to the knowledge of the researchers in this field of study. The researchers will be able to use the study as a reference for future studies. Other study findings can also be compared to the findings of this study. The findings will also be significant to policymakers in that it may serve as a guide to them when making policies regarding private equity fund investing.

# **Theoretical Review**

# Modern Portfolio Theory

Modern Portfolio Theory is a theory of finance that maximizes portfolio expected return for a given amount of portfolio risk, or equivalently minimizes risk for a given level of expected return, by carefully choosing the proportions of various assets. The theory developed by Nobel Laureate Harry Markowitz in 1950s MPT suggests that you can limit the volatility in portfolio, while improving its performance, by spreading the risk among different types of securities that always do not behave the same way (Markowitz, 1952). It is a principle of investing that the higher the risk, the higher the potential return and conversely, the lower the risk, the lower the return.

According to MPT, a portfolio exhibits risk and return characteristics based on its composition and the way those components relate to each other. For each level of risk, there is an "optimal" asset allocation that is designed to produce the best balance of risk versus returns. An optimal portfolio will neither provide the highest returns, nor the lowest risk of all possible portfolio combinations – it will attempt to balance the lowest risk for a given level of return and the greatest return for an acceptable level of risk. This theory helped in explaining how the choice of investment strategies affects financial performance of private equity funds investing in Kenya.

# **Investment Theory**

Keynes and Fisher (1960), both argued that investments are made until the present value of expected future revenues, at the margin, is equal to the opportunity cost of capital. This means that investments are made until the net present value is equal to zero. An investment is expected to generate a stream of future cash flows. Fisher referred to the discount rate as the rate of return over costs or the internal rate of return. Keynes, on the other hand, called it the marginal efficiency of capital, (Baddeley, 2003, & Alchian, 1955). The fundamental difference between the "Keynesian view" and Fisher ("Hayekian view") lies in the perception of risk and uncertainty, and how expectations are formed. Keynes did not regard investment as an adjustment process toward equilibrium.

Hayek (1941) and Fisher (1930), on the other hand, regarded investment as an optimal adjustment path towards an optimal capital stock. In the Keynesian theory, investments are not determined by some underlying optimal capital stock. Instead genuine or radical uncertainty takes a central position. Keynes believed that humans were "animal spirited" and that this, combined with irrational and volatile expectations, made the thought of investment as an adjustment process toward equilibrium futile. This theory helped in explaining how the choice of investment strategies affects financial performance of private equity funds investing in Kenya.

# **Capital Asset Pricing Model**

Fama & French (1992) updated and synthesized the evidence on the empirical failures of the CAPM. Using the cross-section regression approach, they confirm that size, earnings-price, debt equity and book-to-market ratios add to the explanation of expected stock returns provided by market beta. Fama & French (1996) reach the same conclusion using the time-series regression approach applied to portfolios of stocks sorted on price ratios as a development from the capital asset pricing model (CAPM) of William Sharpe (1964) & John Lintner (1965).

The CAPM notes that the expected return of a security or a portfolio equals the rate on a riskfree security plus a risk premium. If this expected return does not meet or beat the required return, then the investment should not be undertaken. The model takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk or market risk), often represented by the quantity beta ( $\beta$ ), as well as the expected return of the market and the expected return of a theoretical risk-free asset. CAPM "suggests that an investor's cost of equity capital is determined by beta. The general idea behind CAPM is that investors need to be compensated in two ways: time value of money and risk. The time value of money is represented by the risk-free (rf) rate in the formula and compensates the investors for placing money in any investment over a period of time. The other half of the formula represents risk and calculates the amount of compensation the investor needs for taking on additional risk. This is calculated by taking a risk measure (beta) that compares the returns of the asset to the market over a period of time and to the market premium (Rm-rf). Therefore expected return of an asset is given be sum of risk-free (rf) and product of quantity beta ( $\beta$ ) in the financial industry with premium (Rm-rf). The theory helped in explaining that the expected return of investment influences the choice of investment strategies.

# Three Factor Model

In asset pricing and portfolio management the Fama–French three-factor model is a model designed by Eugene Fama and Kenneth French (1992) to describe stock returns. Fama and French were professors at the University Of Chicago Booth School Of Business. The traditional asset pricing model, known formally as the Capital Asset Pricing Model (CAPM) uses only one variable to describe the returns of a portfolio or stock with the returns of the market as a whole. In contrast, the Fama–French (2000) model uses three variables. Fama and French started with the observation that two classes of stocks have tended to do better than the market as a whole: small caps and stocks with a high book-to-market ratio (customarily called value stocks, contrasted with growth stocks). They then added two factors to CAPM to reflect a portfolio's exposure to these two classes.

Fama & French attempted to better measure market returns and, through research, found that value stocks outperform growth stocks; similarly, small cap stocks tend to outperform large cap stocks. As an evaluation tool, the performance of portfolios with a large number of small cap or value stocks would be lower than the CAPM result, as the three factor model adjusts downward for small cap and value outperformance. So, everybody that buys any traded stock (or portfolio of stocks) takes market risk. If your portfolio holds all traded stocks in the weighted proportion of the total market, that's the end of the story But, if your portfolio differs in its makeup in average size or on the growth-value spectrum of the market, then you will have a different result.

There are additional premiums for accepting a portfolio either larger or smaller than the market, and/or with a tilt toward growth or value different than the market. (These risks are sometimes called a priced risk, because we can identify additional return for accepting them.) Fama-French defined the size premium as the difference in returns between the largest stocks and the smallest stocks in the CRSP database. They defined the value premium as the difference in returns between the stocks with the 30% highest Book to Market Ratios (BTM) and the 30% lowest BTM. The theory helps in explaining that the expected return of investment influences the choice of investment strategies.

# **Determinants of Financial Performance of Private Equity Funds**

# Exchange Rate

PE firms in Kenya usually have a high proportionate ownership of foreign partners. Currency exchanges between the investee country and the investors' home currency have an impact on

PE firms' financial performance (Cumming & Johan, 2007). Real exchange rate is commonly known as a measure of international competitiveness. It is also known as an index of competitiveness of currency of any country and an inverse relationship between this index and competitiveness exists. The lower the value of this index in any country, the higher the competitiveness of the currency of that country will be.

It is a widely held view that exchange rate volatility should affect corporate expected cash flows and hence its performance by causing changes in the home currency denominated revenues (costs) and the terms of competition for firms with international activities (Hinchberger, 2013). Metrick and Yasuda (2007) did a study on the casual relationship between exchange rates and private equity performance where it was established that fluctuations affects the profits repatriated to private equity foreign investors. Depreciation of the Kenya shilling against United States Dollar is expected to decrease PE firms' financial performance.

## Level of Interest Rate

Debt is a key component of PE. A key signal of the performance of PE is the level of interest rates and the arbitrage opportunities to which they give rise. This is ultimately an issue of global savings availability and liquidity policies. When liquidity and savings are plentiful, and rates are low, investors will have a high appetite for investment and PE firms' step in to fill this gap. -PE firms finance firm buyouts by using high levels of debt, mainly because this is cheaper than equity financing (Hinchberger, 2013). The limited partner structure essentially subordinates returns to equity investors with respect to creditor returns. Thus as a compensation, providers of equity capital require relatively larger returns. Since debt capital is more cost effective in this sense, debt financing enables higher returns on investments. The inherent tax shield in debt is another important reason why debt financing is cheaper. Interest paid on debt is tax-deductible, thus the investment returns highly depends on the size of the tax shield (Hinchberger, 2013).

# Inflation

Inflation refers to the general increase in the price of commodities over a given duration. Inflation tends to push up the price of commodities without a corresponding increase in their real value. Private equity firms are adversely affected by inflation since they tend to hold investment over duration of time between acquisition and exit (Nielsen, 2011). Private equity investors provide capital to private companies, usually for expansion, new product development, or restructuring of the company's operations, management, or ownership.

As the firm grows, private equity investors sell their stakes in the company either to return the capital to the limited partners or to find new investee companies through an IPO or a private placement. Many academics and practitioners have argued that the success of private equity firms' buyouts and their financial performance by extension stems at least in part from a gradual inflation rate which does not distort the value of investments. PE firms are also extremely wary of government measures to control inflation through currency devaluation since it ultimately affects private equity firm's illiquid investments which cannot be easily disposed (Parra-Bernal & Blount, 2011). Inflation has an adverse effect on the exit returns when PE firms divest or dispose their stake in an investment (Parra-Bernal & Blount, 2011). IPOs form a favored channel for private equity firms when they choose to disinvest or sell their investments and stake in companies they have previously acquired.

## **Empirical Studies**

Kumar and Sandip (2012) analysed factors affecting private equity investment decision: evidence from Singapore. This study attempted to identify, investigate and analyse the factors and their inter-relationship influencing a private equity fund manager's investment decision making. This study used a sample of thirty six private equity firms in Singapore based on a survey across the firms with parameters documented in various past studies. The respondents were identified using the published database of private equity firms from two sources namely: Singapore Venture Capital & Private Equity Directory 2009/10 [2] and another online database [3] specific to Venture capital industry in Singapore. The total population of 74 private equity and venture capital firms was identified as the sample population. Using principle component analysis, this study arrived at interesting findings during a phase when recession was in full momentum. Growth potential of the product's market expected or projected returns and pricing or valuation of the portfolio company along with entrepreneurial or management attributes, were found to be the most influential factors. Growth potential of the portfolio company's product market was found to form a strong correlation with regulatory & legal framework of the portfolio company's country and also with demand for the portfolio company's product. On the other hand expected return from the investment proposal was found to correlate significantly with quality of the business plan.

Kaplan and Schoar (2005) studied private equity performance: returns, persistence and capital flows in U.S.A. The study investigated the performance and capital inflows of private equity partnerships. The data for the study was obtained from Venture Economics. Venture Economics collected quarterly information on individual funds in the private equity industry. The sample covered the years 1980 to 2001. Because of the rapid industry growth in the 1990s, the earlier years contained relatively fewer fund observations. Two samples of data were used. The main part of the analysis, included firms: (1) that have been officially liquidated; or (2) whose returns are unchanged for at least the final six quarters observed; and (3) whose reported unrealized value is less than 10% of committed capital. The study obtained 746 funds that satisfy these criteria, consisting largely of funds started before 1995. The study also used a larger sample of funds that had either been officially liquidated or were started before 1997. Using these sample selection criteria, the study obtained a sample of 1090 funds. The study found that average fund returns were approximately 500 million dollars although there was substantial heterogeneity across funds, returns persisted strongly across different funds raised by a partnership, better performing partnerships were more likely to raise follow-on funds and larger funds. This relationship was concave so that top performing partnerships grow proportionally less than average performing partnerships. At the industry level, market entry and fund performance was cyclical and funds are less sensitive to cycles than new entrants

See and Jusoh (2012) did an investigation on fund characteristics and fund performance: evidence of Malaysian Mutual Funds. This study examined the fund characteristics that affect

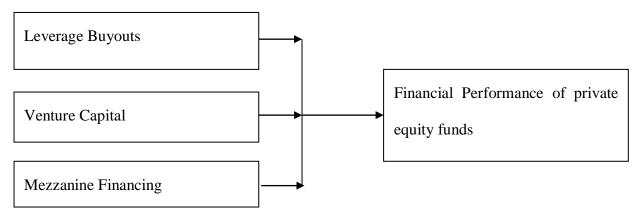
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fund performance by studying 69 Malaysian equity mutual funds representing 44 conventional funds and 25 Islamic funds over a period of five years. The characteristics examined include Risk, Fund Size, Management Expense Ratio, Turnover Ratio and Fund Age. To find the Malaysian mutual funds exclusively invested in domestic securities, list of funds from the Securities Commission was used. From the list of Securities Commission, only domestic open-ended private equity funds were selected. Equity funds were selected as the samples of this study were stocks, where at least 75 percent of the funds were invested in the security market. Since the period covered in this study was from 2005 to 2009, those funds launched after January 2005 were excluded; they would make the study biased since their data did not cover the period required. The hypotheses were tested using several regression analyses to see whether Risk, Fund Size, Management Expense Ratio, Turnover Ratio and Fund Age have significant relationships with Fund Performance. The results showed that higher risk fund provides higher return. Those funds which spent more on research expenses gave superior return compared to those that spent less. The findings also showed that young funds performed better than old ones. However, Fund Size and Turnover Ratios were found to have no significant relationship with Fund Performance. Overall, the results indicated that investors should focus on young funds and select fund based on his/her preferred risk level. Fund managers should understand the characteristics that might affect fund performance and develop strategies on how to increase their funds' performance.

Gachoka (2013) investigated the effect of investment strategies on the financial performance of private equity funds investing in Kenya. The objectives of this study were; to evaluate the investment strategies used by private equity fund investors in Kenya; to evaluate the performance of the private equity fund sector in Kenya and to evaluate the effects of investment strategies on the financial performance of private equity funds in Kenya. The study adopted a descriptive survey design in order to meet the objectives. The population of this study was the 20 licensed investment fund managers in Kenya. For the purposes of this study, both primary and secondary data were used. Primary data was collected through the use of a questionnaire structured based on the objectives of the study. Secondary data was sourced from the reports and websites of the various fund management companies as well as the CMA website and the NSE website for the period between 2009 to 2012. Data was analysed using descriptive statistics as well as linear regression. The findings showed that 45% of the companies adopted venture capital as a strategy, 33% adopted leveraged buyouts and 22% adopted mezzanine financing as an investment strategy. The results also showed that venture capital as an investment strategy had a significant positive effect on the performance of PE funds ( $\beta = 1.727$ ). This effect was significant at 5% level of confidence. The study also found that leveraged buyouts as an investment strategy had a significant positive effect on performance of PE funds ( $\beta = 1.947$ ). This effect was significant at 5% level of confidence. Finally, the results showed that mezzanine financing as an investment strategy had a significant positive effect on performance of PE funds ( $\beta = 1.175$ ). This effect was significant at 5% level of confidence. The study concluded that all the investment strategies had a positive and significant effect on the performance of PE fund investing in Kenya. The study recommends that PE fund managers should adopt the strategies discussed above based on their expected returns. This will help ensure that the PE funds give maximum

returns to their investors. This study was conducted in 2013 that is five years ago, therefore the investment strategies might have different effects on financial performance of private equity firms, hence the reason for conducting the current study.

Osano (2013) did a study on the effect of investment strategies on financial performance of investment funds in Kenva. The objective of this study was to identify investment strategies adopted by investment funds in Kenya and the effect of the strategies on financial performance of the funds. The population of study was all investment funds in Kenya and census was carried out on the nineteen investment funds since they are not many as given by Capital Market Authority Cap. 485A as of 2013. Primary data was collected through personal interviews by use of interview guide to a total of ten investment managers who turned out to give a positive response. Secondary data was also collected from respective investment funds financial reports for the year 2012. Descriptive analysis was used to find out the type of investment strategy that was used and classified them either as active investment strategy or passive investment strategy. The study concluded that investment funds in Kenya take an active investment strategy. From inferential statistics, a positive relationship was established between ROA and the Predictor variables which were investment strategy, Leverage, Liquidity, age and size. Chisquare test results showed that companies with high liquidity can be said to be better performing as compared to those without or with lower liquidity. This study was conducted in 2013 that is five years ago, therefore the investment strategies might have different effects on financial performance of private equity firms, hence the reason for conducting the current study.



## **Conceptual Framework**

### **Independent Variables**

### **Dependent Variable**

### **Research Methodology**

The method of analysis that most captures the objectives of this study is descriptive analysis and the study design is therefore appropriately named a descriptive design. In this manner, the study described the relationship between the variables in the study. This was considered as the appropriate research design in this study. The study was a survey of the private equity fund investment management companies in Kenya. According to CMA (2017) there are 20 licensed private equity fund investment management companies in Kenya The study targeted all the funds managed by the 20 private equity fund investment management companies in Kenya, this is in order to ascertain the proportion of each investment strategies used by these companies and how it influence their performance. The study was carried out for a period of 5 years, starting from year 2013 to years 2017.

For the purposes of this study secondary data was used. Secondary data was collected through the use of data collection sheet. Secondary data was sourced from the reports and websites of the various fund management companies as well as the CMA website and the NSE website. One respondent was selected in each organization to help in filling the data collection sheet on data relating to investment strategies which was not readily available in the company financial report. The respondent selected was senior finance staff who helped in filling in the data collection sheet that was used to gather secondary data. The study collected information on the effects of investment strategies on the financial performance of private equity funds for five years between 2013 - 2017.

Analysis of Variance (ANOVA) was used to test the regression model level of significance at 95% confidence level and 5 % level of significance. F-value was used to test the joint significance of all coefficients and t-test for the test significance of individual coefficients. Adjusted R squared R2 was used to determine the variation in the dependent variable due to changes in the independent variables.

After collection of data and testing for reliability and analyzed with the aid of the Statistical Package for Social Sciences (SPSS) Then, the study used descriptive statistics and inferential statistics to establish the relationship between the variables. The descriptive statistics here were the percentages, mean and standard deviations.

Linear regression was carried out to test the influence of the various investment strategies on the financial performance of the private equity funds. The model was tested for statistical significance at a level of significance of 95% and the results were interpreted using coefficients of variables, p-values, and R-squared statistics. The study used the following logit regression model.

 $Yjt = C + \alpha Xjt + \beta Zt + \varepsilon jt \dots 1$ 

The j referred to an individual financial institution; t referred to year; Yjt is a dependent variable referred to the financial performance of the private equity funds in a particular year t; the C was the intercept; X represented the independent variable which is investment strategies, whereas Z represented the other determinants of a financial performance;  $\alpha$  and  $\beta$  are co-efficient and  $\epsilon jt$  represented the error term.

The Analytical Model was:

 $Y = \beta_0 + \beta_1 LBO + \beta_2 VC + \beta_3 MF + \beta_4 SIZE + \alpha$ 

Where: Y=Financial Performance; LBO=Leveraged Buyouts; VO=Venture Capital; MF=Mezzanine Financing; SIZE=Size of the organization;  $\beta$ 0=constant or intercept;  $\alpha$ =error term.

### **Research Findings**

#### **Empirical Model**

A multiple regression analysis was conducted in this study to test the influence among the predictor variables.

Model Goodness of Fit Test							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sign		
1	.912 <sup>a</sup>	.832	.798	.01210	.001		

From the findings, the value of adjusted R squared was 0.798 an indication that there was variation of 79.8% on financial performance of private equity funds investing in Kenya due to changes in leverage buyouts, venture capital, and mezzanine financing at the confidence interval of 95%. This implies that 79.8% changes in financial performance of private equity funds investing in Kenya could be as a result for changes in leverage buyouts, venture capital, and mezzanine financing. R is the correlation coefficient which shows the relationship between the study variables. From the findings, the study found that there was a strong positive relationship between the study variables as shown by 0.912.

#### **Results of Analysis of Variance**

Mo	del	Sum of Squares	df	Mean Square	F	Sig.
1	Residual	2.844	3	0.948	8.369	.001 <sup>b</sup>
	Regression	10.875	96	0.113		
	Total	13.719	99			

From the finding of the ANOVA, the population parameters had a significance level of 0.01 which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) is less than 5%. The calculated value was greater than the critical value (2.311<8.369) an indication that leverage buyouts, venture capital, and mezzanine financing significantly affects financial performance of private equity funds investing in Kenya. The significance value was less than 0.05, indicating that the model was statistically significant.

#### **Results of Estimate Model**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	-	
1	Constant	1.445	0.453		3.190	.002
	Leverage buyouts	0.532	0.197	.014	2.701	.005
	Venture capital	0.499	0.174	.212	2.868	.001
	Mezzanine Financing	0.262	0.092	.188	2.848	.015

The resulting regression model was;

 $Y = 1.445 + 0.532 \; X_1 + 0.499 \; X_2 + 0.262 \; X_3$ 

From the above regression equation, it was revealed that holding leverage buyouts, venture capital, and mezzanine financing to a constant zero, financial performance of private equity funds investing in Kenya would be at 1.445. The results on table above reveal that leveraged buyouts had a significant coefficient (B= 0.532, p value=0.005). This implies that leveraged

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buyouts had positive significant effect on financial performance of private equity funds. The study finding revealed that venture capital had a significant coefficient (B= 0.499, p value=0.001). This implies that venture capital had positive significant effect on financial performance of private equity funds. The study finding further revealed that mezzanine financing had a significant coefficient (B= 0.262, p value=0.015). It implies that mezzanine financing had positive significant effect on financial performance of private equity funds.

## **Conclusion and Recommendations**

## Conclusion

The study revealed that changes in leveraged buyouts, venture capital, and mezzanine financing could determine the financial performance of private equity funds investing in Kenya. Thus the study concludes that leveraged buyouts, venture capital, and mezzanine financing are the determinant of financial performance of private equity funds investing in Kenya.

The study also revealed that there was strong relationship between financial performance of private equity funds and leveraged buyouts, venture capital, and mezzanine financing. The study found that leveraged buyouts, venture capital, and mezzanine financing positively influence the financial performance of private equity funds investing in Kenya.

# Limitations of the Study

In attaining its objective, the study was limited to 20 licensed private equity fund investment management companies in Kenya. Secondary data was collected from reports and websites of the companies as well as the CMA website and the NSE website. The study had a degree of limitation to precision of the data obtained from the secondary data source. The data was verifiable as it came from the company publications; it nonetheless could still be prone to these shortcomings.

The study was limited to determine the effects of investment strategies on the financial performance of private equity funds investing in Kenya. For this reason only private equity funds could not be incorporated in the study. ??? The study was based on a five years study period from the year 2013 to 2017. A longer duration of the study will have captured periods of various significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem.

# **Recommendations for Further Research**

This study focused on determining the effect to investment strategies on the financial performance of private equity funds investing in Kenya. The study considered three investment strategies which explained 79.8% of financial performance of the private equity funds. The study therefore recommends further research to be conducted on other factors that affect the financial performance of the private equity funds.

The study targeted only 20 licensed companies, the study therefore recommends further research to be done in the entire sector this would help in uncovering more information. The

study was conducted in PE companies; the study recommends replication of the research study in other industries such as financial service industries.

#### References

- Ang. A, & Sorensen, M. (2011). Risk, returns, and optimal holdings of private equity, *Journal of Private Equity*, 5-122.
- Bance, A. (2004). Why and how to invest in private equity. Investor Relations Committee Paper.
- Bodie, Z., Kane, A & Marcus, A. J. (2011). *Investments. Sixth edition*. McGraw-Hill, New York
- Burdel, S. (2014). Private equity secondary's: Opening the liquidity tap. *Thunderbird International Business Review*, 51(6), 533–537.
- Chen, P., G. Baierl & Kaplan, P. (2002). Venture capital and its role in strategic asset allocation. *Journal of Portfolio Management*, 28(2), 83-90.
- Conroy, R. M. & R. S. Harris (2009). How good are private equity returns? *Journal of Applied Corporate Finance*, 19(3), 96-108.
- Cressy, R., Munari, F. & Malipiero, A. (2007). Playing to their strengths? Evidence that specialization in the private equity industry confers competitive advantage. *Journal of Corporate Finance* 13(4), 647-669.
- Cumming, D. & Johan, S. (2007). Regulatory harmonization and the development of private equity markets *Journal of Banking & Finance 31 (10), 3218-3259.*
- Davila, A., G. Foster & A. Gupta (2003). Venture capital financing and the growth of startup firms. *Journal of Business Venturing*, 18(6), 689
- Diller, C. & Kaserer, C. (2012). What drives cash flow based European private equity returns? Fund inflows, skilled GPs, and/or risk? *European Financial Management*, 15(3), 643-675.
- Driessen, J., T. C. Lin & Phalippou, L. (2014). A new method to estimate risk and return of non-traded assets from cash flows: The case of private equity funds. NBER Working Paper Series. Available at SSRN: ssrn.com/abstract=1152685.
- Fraser-Sampson, G. (2011). Private equity as an asset class. John Wiley & Sons.
- Gatauwa, M. J. (2014). A survey of private equity investments in Kenya, *European Journal* of Business and Management, 6 (3) 15-20.
- Gatauwa (2014). A survey of Private Equity Investments in Kenya. European Journal of Business and Management, 6(3).
- Grabenwarter, U., & Weidig, T. (2015). *Exposed to the J-Curve: understanding and managing private equity fund investments*. Euro money Books.
- Groh, A. P. and O. Gottschalg (2008). *Measuring the risk-adjusted performance of US buyouts*. NBER Working Paper No. W14148.
- Hinchberger, B. (2013). *Private equity: new cash for expanding businesses*. Brookings Papers on Economic Activity. Rochester. New York.
- Kaplan, S. & Schoar, A. (2015). Private equity performance: returns, persistence, and capital flows, *the Journal of Finance*, 9(4).
- Kaplan, S. N. & Strömberg, P. (2009). Leveraged buyouts and private equity. *Journal of Economic Perspectives*, 23(1), 121-146.
- Kaplan, S. & Schoar, A. (2005). Private Equity Performance: Returns, Persistence and Capital Flows. Unpublished MBA Thesis, University of Nairobi.
- Kiungu, B.K. (2012). The influence of behavioral biases on the trading decisions of equity fund investors: A case of British American (BRITAM) Kenya Equity Fund. Unpublished MSC Project, University of Nairobi.

- Kumar, A.P. & Sandip, C. (2012). An analysis of factors affecting private equity investment decision: evidence from Singapore. *International Journal of Business Research*, 12 (2),
- Kung'u, N.D (2013). The effect of selected macroeconomic variables on the financial performance of private equity firms in Kenya. Unpublished MBA Thesis, University of Nairobi.
- Leitner, C., Mansour, A. & Nalyor, S. (2007). *Alternative investments in perspective*. RREEF Research, Deutsche Bank Group.
- Ljungqvist, A. & M. Richardson (2003). *The cash flow, return and risk characteristics of private equity*. NYU Working Paper No. FIN-03-001. Available at SSRN: ssrn.com/abstract=369600.
- Metrick, A. & Yasuda, A. (2017). *The economics of private equity funds*. Rochester, New York.
- Murithi, G.N. (2012). *The assessment of risk return trade off among private equity firms in Kenya*. Unpublished MSC Project, University of Nairobi.
- Ndirangu, A.N (2017). The effect of firm performance on impact investment in Kenya: A case study of Jamii Bora Bank. Unpublished MBA Thesis, USIU.
- Nielsen, K. M. (2011). The return to direct investment in private firms: new evidence on the private equity premium puzzle. *European Financial Management*, 17(3), 436–463.
- Parra-Bernal, G. & Blount, J. (2011). *Analysis, private equity wary of Brazil currency, prices*. Reuters. Sao Paulo.
- Rice. M. (2012). *Private equity, the role of private equity in diversified portfolios*, DiMeo Schneider & Associates, L.L.C. White Paper.
- See, Y.P & Jusoh, R. (2012). Fund characteristics and fund performance: evidence of Malaysian mutual funds. *International Journal of Economics and Management Sciences*, 1(9), 31-43.
- Tuck, H (2003). *Note of private equity asset allocation*. Center for Private Equity and Entrepreneurship at Tuck School of Business, Darthmouth.
- Tuimising., N. (2012). *Private equity in Kenya: A survey of emerging legal and institutional issues.* (Unpublished PhD Dissertation). University of Warwick.