

**RELATIONSHIP BETWEEN FIXED CAPITAL INVESTMENT AND
STOCK RETURNS OF FIRMS LISTED AT THE NAIROBI
SECURITIES EXCHANGE**

BY

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DEDICATION

This research project is my original work and has not been submitted to any other college, institution or university.

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DEDICATION

This research project would not have been a success without the support and contribution of all the people, who immeasurably contributed towards my ultimate goal.

Most important I wish to extend my gratefulness to the God for providing me with good health, strength and wisdom to enable achieve success in this project.

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LIST OF ABBREVIATIONS

- ANOVA** - Analysis of Variance
- MIRR** - Modified Internal Rate of Return
- MPT** - Modern Portfolio Theory
- NASI** - NSE All Share Index
- NPV** - Net Present Value
- NSE** - Nairobi Securities Exchange
- ROA** - Return on Assets
- ROE** - Return on Equity
- SACCO** - Savings and Credit Cooperatives
- SPSS** - Statistical Package for Social Sciences
- VIF** - Variance Inflation Factors

ABSTRACT

Firm investment is one of the factors that affect the corporate value since investment decisions are associated with the decisions about the allocation of funds, in terms of sources of financing as well as the use of funds for the short-term and long-term purposes. However, the decision to invest is subjective and a wrong investment decision can lead companies even to bankruptcy of the firm, which may negatively affect the firm's stock returns. This study therefore sought to determine the relationship between fixed capital investment and stock returns of firms listed at the Nairobi Securities Exchange. The modern portfolio, the q theory of investments and the signaling theory were explored as the key theories of the study. The study adopted a descriptive research design and the population of this study was made up of 48 non-financial firms listed at the Nairobi Securities Exchange as at December 31st 2017. This study used secondary data which was collected using a data collection sheet for a period of five years from (2013- 2017). To analyze the collected data the study used the multiple linear regression models and the Karl Pearson correlation coefficient. The study also found a negative and insignificant relationship between fixed capital investment and stock returns while the relationship between dividend payout and stock returns was found to be insignificant and positive. The study also found that profitability had a significant and positive relationship with stock returns. Finally, the results revealed that size had a negative and insignificant relationship with stock returns whilst age had a positive and insignificant relationship with stock returns of listed non-financial firms in Kenya. The study concluded that fixed capital investment, dividend policy, age and size of the firm do not have a significant effect on stock returns but profitability significantly influences stock returns.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

According to Efni 2017, one of the major Financial Management decisions is the decision to invest since this decision affects the Return on Investments as well as the cash flow of the company of the company in the future. This decision to invest is of key importance to the Business Financial System. Tewolde 2008 states that proper investments which apply the recommended strategies create shareholder value and hence improved satisfaction. Company investment entails a lot of resources to be pumped into the project and these resources are obtained in different ways. Haque 2016 noted that among the various sources, stock market gives a chance for funds raising by the Organization since they can give the public a chance to buy the equity shares of the firm in order to raise their share capital. Warner 2014 observed that the Investment Growth Effect is achieved when an Organization raises their asset investment and hence lowering their risk-adjusted returns.

It is clear that there exists a distinct relationship between fixed capital investments and the existing stock returns. Economic Theory acknowledges this relationship and goes ahead to explain that it is mainly because of the period varying discounted rates that affect both the fixed capital investments and the stock returns. Li 2004 through the Signaling Theory confirms that capital investment is a key signal which is seen by the experts to be a predictor of future returns on investments as well as the expected returns on stock. Dang 2012, with his Theory Q of Investments, observes that it is always safe to opt for an investment decision when the profit is low as compared to the capital. Another Theory, the Portfolio Theory, encourages the spreading out of investments in the different field which might reduce the associated risks or possibly give the same expected results with reduced risk levels.

Locally, the Nairobi Securities ensures that trade securities such as bonds are created and traded to enhance the distribution of capital in the country fairly. Consequently, NSE has grown rapidly from when it was introduced up until now where it holds the title of the biggest Security Exchange in the East and Central Africa (Mukanzi, Mukanzi & Maniagi, 2016). For more than 10 years now, the Security Exchange has encountered major growth especially through the automation of process which allow trader to trade from the convenience of their firms without the need for intermediaries (Ngugi, 2017). The listing made by the NSE on the firm's performance, will contribute to their overall success in terms of the capital market. According to Mukanzi 2016, the top management should be well equipped with the skills of investment and the consequent profits expected to ensure their firms have a competitive edge over the other firms in the industry.

1.1.1 Fixed Capital Investment

Investment of Fixed Capital is elaborated as the ongoing use of resources for some time with a hope of acquiring future benefits which are expected to add value to the invested resources with the time consideration in regards to the current inflation rate as well as the risks involved (Chau & Hirth, 2010). Investment can also be considered to be a decision-making process with several steps from the identification of an investment related opportunity to the assessment of its viability and finally the approval of the investment project (Ogilo & Ali, 2015). The decision to invest is interrelated to establishing all the assets of an Organization, their structure and the associated risks (Efni, 2017). Organization's investment decision is the current worth of the capital assets as it looks forward to gain benefits from in the future (Silva et al., 2013).

Organization's decision to invest is inclusive of extension, gaining, advancing as well as the refurbishing the capital assets. The agreement to sell a division or the entire business venture is also classified as an investment (Geng & N'Diaye, 2012). Firms can invest in the latest systems for extension while looking forward that the return on investment will be enticing in the economic sense. This decision to invest is also made for the modernization of systems to ensure efficiency (Tewolde, 2008). Investments are majorly to get profits. With the investment decision highly dependent on risk factors, investors cannot really tell the highest rewarding investment within the stipulated time frame which they would all prefer. But with uncertainty, it's all a matter of risk taking and taking a chance (Efni, 2017).

When a firm decides to take the investment option, it is required to put in its capital assets effectively in the future assets with eagerness to get more value over a time frame. This Investment decision is a representation of the resources utilized by an organization so as to buy or ensure quality property and plants (Putintica & Bonaci, 2013). Decision to invest commands maximum consideration since it will determine the company's development and potential risks. These decisions are hard as well as undoable while they demand large sums of resources (Geng & N'Diaye, 2012). The company's choice of investment may be considered by the use of the Investment Index that indicates the worth stated as the future investment and the capital assets and less the sold assets or those who have been given away as put in the Financial Statements divide according by the sum of all assets averaged (da Silva et al., 2013).

1.1.2 Stock Returns

These are defined as the profits that the investors get from the stock market. The supposed profits are in terms of earnings gained from selling or through the company giving divided to its shareholders in a period of time (Al-Yahyaee, 2015). This Stock returns is also explained as the amount of profits gotten by the shareholders from their investments which includes the advantages and disadvantages of that venture (Suwardi, Yunita & Iradianty, 2016). These expected benefits are subject to vary due to the prevailing market risks. These results to either positive or negative impact. The investments are also not constant and are could vary depending on the investors and the level of risks the said investors are willing to bear and the prevailing quality of the stock market (Al-Yahyaee, 2015)

This investment is future oriented and integrates the expected cash flow as well as the factors affecting discounts and it comprises useful data in regards to stock returns and the potential growth levels (Tapa & Hussin, 2016). According to Efni 2017, Investment is a very major determinant of the way a firm will perform financially. The returns on stock are an indication the worth of an organization at the given prevailing prices in market. The returns on stock may be estimated depending on the prevailing stock prices or through the returns from the respective shareholders. The return on stock is calculated through the share contained in each dividend for some stipulated time frame (Suwardi, Yunita & Iradianty, 2016). Also, the return on investment may be measured through division of the total price of the stock and the paid dividends by the past prices in order to the percentage of the return on stock.

1.1.3 Fixed Capital Investment and Stock Returns

Most companies will participate in investment with the view of gaining profits later. For the companies which add their investment they therefore get the poor returns (Titman, Wei & Xie, 2004). These companies which use lots of investment on the capital assets, as compared to their profits consequently will get losses. Leitner 2007 states that the existing evidence indicates the existence of a connection between the market of the stock and the expenditure that companies incur in prospective investments. Companies will invest more and more when the prizes raise and consequently drop its investments when the prizes go down. Hence, the returns on stock can be used to indicate the expected growth of the capital investment as well as the growth rate of the investment (Fricke, 2010).

This Theory of Investment states that all decisions to invest should indicate the return rate at a specific risk while assuming that people are not risk takers or daring (Efni, 2017). The investment Theory of Q notes that where there is an effective market, the process of the goods show the information concerning the market on a company's chances of investment as well as its expected profits (Asad & Cheema, 2017). The theory of asymmetry of information, urges that when a company widely shares the returns of the dividends that are above the market level expectations, their prices consequently goes up. But, the real state of the market will show the worth of their investment which will lead to a sharp drop in the prices of goods. This fact clearly explains the challenges of not enough investments (Liu et al., 2015).

Liu et al (2015) sought to find out the impact of increasing investment on capital assets and the irregular returns on stock in the Taiwanese companies and the results proved that in the full period or the period after the Tsunami there are positive effects of increased investment on capital while there was negative investment on capital which was distributed. According to Houdou (2017), they determined the correlation between prices of goods and the investment corporately and discovered that the sensitivity of investment on others prices on goods goes down in the same share of the market, recorded performance and the intensity of the capital. Titman, Wei and Xie (2009) also determined the impact of investment of capital assets and the expected returns in Japan but failed to see any correlation between the expenditures and the consequent benefits in terms of profits. On the same time, the findings revealed that a correlation between the additional expenses and the resulting profits based on the risks associated for the companies with lots of flowing liquid cash and minimal leverage.

1.1.4 Firms Listed at the Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) is a well-established African Exchange and is located in one of the rapidly growing economic hubs in Africa; Kenya. Its major function is stock exchange especially since it has been licensed by the Capital Market Authority to conduct its legal obligations. Its main duty is to overlook the market security while securities are well exchanged by creating a platform for the buyers and sellers to interact at a minimum fee (Mukanzi, Mukanzi & Maniagi, 2016). The Nairobi Stock Exchange enables the exchange, equity payments as well as any other instruments linked. It is also charged with the responsibility to make a list of the firms registered and allowing the shareholders to buy or sell firm securities and hence it is responsible for the health of the Security Exchange (Ngugi, 2017).

The Nairobi Security Exchange gives a well-balanced, flourishing and a state of the art environment for the buying or selling of bonds and equities. The Nairobi Security Exchange gives a choice friendly environment for both the international as well as the local investors who are eager to gain the experience of trading in the East Africa Market. The Nairobi Security Exchange allows for pub participation in trade and happens to be runners up listed exchange in the African Continent (Ngugi, 2017). The Nairobi Security Exchange has listed its organizations having classified them in terms of Agriculture sector, Accessories and Automobiles Sector, Banking and Commercial services, Sector for construction and allied, Petroleum and Energy sector, Insurance, Manufacturing and Investment sectors, Technology and the Telecommunications industry (NSE, 2017). The Nairobi Security Exchange assists to properly use the savings gained locally hence allowing the redistribution of financial resources based on te activeness of the agents and thus it has become the Centre of attraction for studies (Mukanzi, Mukanzi & Maniagi, 2016)

NSE is constantly on the growth and hence has increased the services it offers from just providence of capital investment to many other functions such as improving the relations between the member firms (Ngugi, 2017). From the past studies, NSE has recorded both improvements and decline in the share index for instance, in 2012 Kshs 173.6 billion was the average annual index and this was a rise by 11% as compared to the annual index observed in 2011. In the next year which was 2013, there was recorded a decrease of 8% in the annual averaged index to an estimated Kshs 159.7 billion. In the 2014 financial year, an increase was recorded from the previous year as the volume traded rose by 17% to Kshs. 186.7 billion (Mukanzi, Mukanzi & Maniagi, 2016). The Nairobi Security Exchange

All Share Index (NASI) recorded and increased total returns from 2008-2015 while they held the prices and the dividends was invested back to the index. But NASI got a reduced total return from January 2015- December 2015 (NSE, 2017). This proves that the securities that are highly risky don't necessarily give positive benefits and that the investors could incur great losses especially once they have benefited from taking risks highly while the others have had low investment risks (Armand, 2016).

1.2 Research Problem

The decision by a company to invest is a key factor that influences their corporate wealth especially due to the fact that the decision to invest are subject to demand funds allocation, with regards to the financing sources and how these sources will be utilized both in the short and long term periods in consideration (Efni, 2017). However, this investment decision is quite irreversible in the sense that one incorrect investment decision could possibly result to very dire consequences such as bankruptcy which will ruin the company's competitiveness and possible benefits incurred (Al-Yahyaee, 2015). According to the provided theories, the Investment theory Q for instance it assists to foretell a wrong correlation existing between investment in capital and the corresponding expected future benefits (Armand, 2016). However, the theory of Classical finance states that the market effect to a company's expenses on the capital assets highly is reliable on the assessment of the market about the company's chances of investment (Yang, 2013). Consequently, the investment decision is dependent on the return rate analysis, which relies on the future flow of income from that particular investment with factors such as risks and uncertainties to be considered over the set time frame (Tewolde, 2008).

Locally, the companies which appear in the NSE list have had a growth in terms of their decision to invest, risks minimization as well as their rate of survival also on the rise. However, the prices of shares at the NSE have become so inconsistent and flexible as the prices have become very shaky and unpredictable over time. A good example is in 2013, when the Nairobi Stock Exchange share index reduced by 8% to Kshs 159.7 billion while in the next year which was 2014 NSE recorded an increase as the traded volume rose by 17% to Kshs 186.7 billion (Ngugi, 2017). Further, some companies which are in the NSE list have been having low performance recorded to an extent that even they have been deregistered from that list for the period of the last ten years. For instance, locally, the Mumias sugar company shares have experienced a downfall of close to 50 percent in the recent past (Machuki, 2014). Hence, there is need to conduct a research on the correlation between capital investments which is fixed and the expected profits at the NSE.

Some studies done on the company's investment have been done all over the world as well as in Kenya. For instance, in Malaysia, Lian et al. (2017) noted the correlation of the company's investment on capital assets and the expected returns on investment all over Malaysia in the sector of consumer products and discovered that that the ratio of investment to assets; expenses on capital assets and the size of the organization have a great impact on the expected profits. However, the findings were keen on the benefits but not the return on shares. Kumar and Li (2016) studied investment of capital items, the ability to be creative had a strong relationship between investment decision and the resultant the subsequent benefits in terms of profits gained by the company. The pre-reviewed studies Internationally were concerned majorly on the correlation between the decision to invest and the performance of the company financially as compared to the decision to invest with the expected profits.

Ngugi (2017) observed that the variables that affect prices of stock in the NSE and he summarized that the Gross Domestic Product, rate of inflation, policies guiding the dividends apportionment and the volume traded all have an impact on the volatility of the prices but the decision to invest was not considered. Okumu (2014) studied the impact of market capital investment imperfection- flow of cash of the companies listed in the Nairobi Stock Exchange and he summarized that the imperfections found in the market capital had an important effect of the firms listed in NSE while the findings pay attention to the market capital on the flow of cash. According to past studies, or empirical studies, there are lots of literature in regards to the decision to invest but the specific correlation between the decision to invest and the expected profits is too big especially among the local listed companies in the NSE. Consequently, little efforts have been made in regards to this field mostly in Kenya which leads to a research gap. The research basically tries to find an answer whether the relationship exists between investments of fixed capital assets and the returns on stock for the listed companies at NSE.

1.3 Research Objective

To sought the relationship between fixed capital investment and stock returns of firms listed at the Nairobi Securities Exchange.

1.4 Value of the Study

This study will be of great importance to the makers of policy who are engaged in policy establishment about the tools for the impact of capital investment which are fixed on the returns of stock. The government as well as the respective regulators may be very willing to understand the impact of fixed capital investment on the returns on stock for effective formulation of policies and regulations.

Companies may be interested in increasing the resources needed for the market and are highly interested in the understanding of the key indicators of fixed capital investment. In specific, organizations would be highly attracted to make sure that the offers made by the public hardly minimize their chances of capital raising in the future endeavors.

This study also reveals the its importance to the academicians to get understanding as well as knowledge about the investment of fixed capital assets on the returns of stock and the possible strength about the determinants that highly impact on the prices as well as contributing to the literature existing about financial management. These findings will be of great significance in coming up with related research topics even in the Nairobi Security Exchange.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The Chapter looks at the reviews made theoretically, that strives to explain the Modern Portfolio Theory, the Q theory of Investment as well as the Theory of Signaling. This part consequently analyses the related literature on capital market investment and the resultant stock prices determinants, empirical studies on the same topic and finally it draws a conceptual framework. This chapter then provides a summary of the literature that has been reviewed relevant to the study.

2.2 Theoretical Review

In theoretical review, the three theories of modern portfolio, the q theory of investments as well as the signaling theory have been explained as the major theories in consideration with regards to this study.

2.2.1 Modern Portfolio Theory

This theory of Modern Portfolio was discovered by Markowitz (1952). This MPT is an investment theory that tries to increase the expected profits for some specific risk, or subsequently reduce the risk levels involved for a specific expected profit by considerably choosing the varying levels of different assets (Omisore, Yusuf & Christopher, 2011). MPT is a framework instrument for the choice and building of portfolios for the investment depending on the expected returns maximization and the consequent reduction in the risks involved (Azizan & Sorooshian, 2014). MPT agrees that it's not good enough to only consider the risks expected and the profits of a specific good. Through the investment of various goods, investors get to enjoy the advantages of diversification, reduced volatility of the portfolio in eternity (Persson, Lejon & Kierkegaard, 2007).

This MPT model aims at portfolio maximization for the specified risk levels, or unambiguously reduces risks for the stated time frame for an expected return with accurate distributions of the different security assets. The MPT model assumes that the people investing are well informed and there are sufficient markets, is presumed to show the return of an asset having been well spread by a key factor, looks out for the risks associated with the standard deviation and shows a portfolio (Lee, Cheng & Chong, 2016). This MPT theory urges people to get different assets to protect against the potential risks and also from the risks particularly in that organization (Omisore, Yusuf & Christopher, 2011). According to MPT, portfolio of the stock model is well utilized by risks minimization of the portfolio as calculated by the different prices of stock and are likely given to change depending on the returns expected of the portfolio (Azizan & Sorooshian, 2014).

This MPT theory states that investments are explained with statistics, with regards to the expected eventual return rate and the volatility experienced during its short term. (Anderson & Garcia- Feijóo, 2006). This volatility is compared to risk, establishing the worst averaged bad year's investment is expected to be. The aim is to carefully select the normal risk tolerance levels, and hence look for a suitable portfolio that maximizes on the returns expected at that risk level (Persson, Lejon & Kierkegaard, 2007). In this regard, the MPT theory, the expenses incurred on capital ventures and the grouping of firms to portfolios according to their sizes to promote the company's growth rate. Also, the portfolios return as well as the cross-section of the returns on stock promote capital expenditure growth.

2.2.2 Q Theory of Investment

This Q theory of investment originated from the workings of Brainard and Tobin (1968). This Q theory suggests that a company's choice to invest highly is dependent on the capital market value capital in the ratio to the cost or replaced capital which is called the marginal Q. Organizations will invest more when there is a high marginal Q and when the marginal Q is less, they will invest less. Just the same as, high capital costs will result to minimized investment while low capital cost results to high investment (Asad & Cheema, 2017). This q theory of investment shows that when the fixed investment costs are not available and the market friction is absent, the company will decide to invest in order to balance the capital marginal value with the capital marginal costs which comprises of capital costs too (DeMarzo et al., 2012).

This q theory of investment links the goods and services market with the financial market. The theory proposes that the investment rate is mostly dependent on the market value ratio of the organization's cost of capital to its cost of replacement (Asad & Cheema, 2017). The Q-theory of investment puts into consideration the benefits in terms of profits expected in the future, and should thus be accountable for the uncertainty effect which come along with the variables of the future and are in line with the decisions to invest (Bo, 2009). This theory of investment encourages that the expected returns on stock are connected with these 3 factors; book-market equity ratio, profits expected as well as the expected investment. The book-market equity ratio as well as the profits expected and the investment rates which are high all result to expected returns being low (Armand, 2016).

The Q theory of investment tries to clarify the existence of a correlation between prices of stock and the investment made corporately. The Tobin's Q gives a measure of the prices of stock as compared to the investment made corporately. It goes ahead to give a measure of the price of stock with regards to the organization's assets (Armand, 2016). An empirical evaluation of the Q-factor model by Asad and Cheema (2017) realized that companies add their investments; while the returns on stock reduces and therefore, they summarized that the decision of a company is dependent on its expected profitability levels in the future (Fricke, 2010). In regards to this research, the Q theory presumes the high returns on stock are achieved by the increase in the prices of goods which finally leads to an increase in the capital investment. Also, the capability of returns on stock to foretell the growth of capital investment which results to low returns on the stock as well as on their prices.

2.2.3 Signaling Theory

This signaling theory was established by Spence (1973). The signaling theory states that the organizations that have a good record of their performance make disclosures more willingly, as by so doing they are considered as a quick way of making themselves outstanding in the marketplace and easily recognizable (Birjandi, Hakemi & Sadeghi, 2015). With regards to the signaling theory, firms have to be very competitive in order to achieve minimal capital requirements (Titman, Wei & Xie, 2004). Kothar, Lewellen and Warner in 2014 observed that when an organization is well known in reporting its financial performance and telling more about the activities they engage in, there is a great chance of getting investors attracted to them and build their trust.

In this signaling theory model, companies that perform very well and have high quality are more easily to be able to give out any kind of information so as to create for themselves a competitive niche as compared to the other companies (Leitner, 2007). In regards to this research, the signaling theory is in conjunction with the addition of expenses incurred during investment which could result to both positive and negative information. Hence, the more an organization invests most likely it will get positive results and when they invest less, or could probably invest more than its needed, but positive information gives a better investment chance.

2.3 Determinants of stock Returns

2.3.1 Fixed Capital Investments

Investment involves the buying of a good or any other valuable item with hopes that the future returns will be favorable and desirable (Chau & Hirth, 2010). The aim of an organization's decision to invest is mostly to optimize the net present value (NPV) because the NPV automatically increases the capital assets (Efni, 2017). According to Liu et al., 2015, companies get involved in the investment of capital in order to raise the company's worth by raising their economic levels and technological enhancements while conducting diversification strategies. This results to a company getting a competitive edge, a reduction in the operational risks which could be incurred and a possible raise in the profits attained. An increase in the expense incurred during investment are linked with an improved chance of greater opportunities to invest. Also, increased expenditure in investment can also foretell that the capital market, that gives investment finances, has more confidence in the management of the company and in the performance of the firm itself (Titman, Wei & Xie, 2004).

According to Titman, Wei and Xie, 2013, Organizations which have raised their investment in capital assets, majorly get reduced returns on stock for the five years that follow respectively. Balvers, Gu, Huang 2013 summarizes that in low scales of return, the rate of investment returns has a negative relationship with the returns on stock and that increased profits as well as the traditional value are both linked to an exposure of risk which could be high. Investment in capital assets and the its use can foretell the returns and profits to be gotten in the future. Liu et al (2015) summarized that the day the announcement to invest is made, the prices of both electronic and non-electronic goods they show favorable and the price movements are positive.

Al-Yahyaee, 2015 noted that the policy of dividends is defined as the practice by the firm's management to follow while decisions on the dividend payout of the organization's earnings by considering how much dividends to distribute to the various shareholders as well as how much they should re-invest. Deodatus 2015, define stated that this policy develops the sharing of an organization's earnings in terms of whether to pay the various shareholders or to at least hold the profits and consider re-investment. The policy of dividends is as well dependent on information provide asymmetrically, that shows that the top officials could have some private information concerning the distributional support of the liquid cash in a project and they can also signal the market using the dividend policy (Suwanna, 2012).

According to Al-Yahyaee 2015, the returns on the stock market is the major aim for the managers in the portfolio and the strategists and analysts and therefore, the payment of dividends is a useful tool to indicate the future earnings distribution policy. With regards to the signaling theory, an organization can decide to announce its much awaited policy on

dividends payout to show the market that it is making efforts in future prospects, which leads to change in its prices of items (Suwanna, 2012). Some theoretical mechanisms which would make the yield of dividend and its payout ratio to distinctively change indirectly with the prices of the items have been put forth and they comprise of; effect of the duration, effect of arbitrage, effect of the rate of return and the effect of information (Al-Yahyaee, 2015)

2.3.3 Profitability

Profitability is defined as the net profit which is retained from the activities related to business and its decisions. Profitability is a reflection of the efficiency and effectiveness of the operations conducted and also it reveals the impact of asset management liquidity and the company results liability. Silva et al., 2013 defined profitability as a major factor for survival in the highly competitive market share. Investment in the capital items is among the critical ingredients which facilitate the profits gained by an organization (Lian et al., 2017). Most investors will invest in the organizations that have good profitability to their investment only (Suwardi, Yunita & Iradianty, 2016). Major hints like the ROA, ROE and asset turnover have been in the past used as comparative to the organizations profitability in relation to the corporate governance levels, concentration of ownership or even can be used to predict future prices of shares and various other necessary applications (Maiyo, 2013). The rate of profitability is measured in regards to the performance measures such as, margins of both sales and profit, asset returns, net worth returns among other variables (Silva et al., 2013).

2.3.4 Firm Size

Size of the firm is a key factor in explaining the possible returns of any equity given. Farhan and Sharif (2015) did a study and summarized that the firm size is both unfavourably and significantly linked to the returns on the stock. The items in a company that has minimal capitalizations in the market get an increased return as compared to the large items as well as the firms that are small in size tend to get increased profits as compared to the company's whose size is large. The company size is evaluated by billing the value annually, the worth of the capital assets and the total worth of capital, as the magnitudes of communication may be used to comparing with other organizations. It is known that bigger companies have a large capacity to invest and get finances as compared to the minute organizations and also the large firms have a more impact on the market share as compared to the small companies (Silva et al., 2013).the size of an organization is dictated by the asset log it contains.

2.3.5 Age of the Firm

The age of the firm is said to be the duration in which organization has been incorporated in terms of years. The age of the company determines its experience level, as it is acquired over time and the organization's age is calculated since the year in which the firm became incorporated (Silva et al., 2013). The firms which have been in existence for long tend to have acquire more exposure and have definitely learnt a lot and they benefit largely in terms of superior performance when in comparison with the young companies. But, the firms which have been in existence for long have become inactive which comes with their age. Consequently, the much younger and vibrant companies tend to become successful in their level of adjustments to changes in the market environment.in this perception in mind

about the age of a company, organizations may go after a low-key lifestyle and thus avoid lots of the associated risks, restructuring of the organization largely and minimize internal conflicts (Suwardi, Yunita & Iradianty, 2016)

2.3.6 Inflation

Inflation is defined as the rate of rising the general goods and services over a period of time, which consecutively leads to falling of the power to purchase these services or goods. The rate of inflation shows the general capability of a government to well control its economy. Possible variations in the inflation rate directly influence the power of purchasing goods and services and the ultimate production costs (Tapa & Hussin, 2016). According to Efni 2017, the rate of inflation will significantly influence the profits registered and the borrowing capacity of an organization with the changes in the expected cash flow and discounted rates. CPI is a measure for the current rate of inflation. The CPI is measured as an average variation for a given time in the costs of goods and services incurred by the consumers in a market. It is also helpful as an economic tool to show the government how to calculate the rate of inflation in the market

2.3.7 Economic Growth

Economic growth affects the level and the number and the various level of opportunities for investment for a company. The growth of the economy gives the nation a good opportunity to give much attention to the long-term business trends and also to consider the various policies of governance. It points out the way the economy is moving towards. Stability in the economy indicates a volatility GDP growth, the rates of interest and inflation the rate of exchange as well as other factors that vary in the economy (Putintica &

Bonaci, 2013). According to Houdou 2017, GDP is defined as the total performance measurement in an organization's performance with its GDP. The increase in GDP, results to a more desirable opportunity for the investors that consequently causes an increased demand for funds to venture into business.

2.3.8 Interest Rates

Puntintica and Bonaci 2013 defined Interest rate as the cost that levels the wish to have wealth which is in the form of cash with what is already available amount of cash, and not necessarily as savings reward. The rate of interest is as a result of income. Its major function is assist in the optimization of resources provided financially and to make sure that the resources are used in such a manner as to promote development and growth of the economy (Efni, 2017). The rate of interest is a factor of discounting in models of valuation. Hence, the rate of interest directly influences the costs and hence the benefits gained on the net profit value (NPV) of the flow of cash in the future. Furthermore, the increased rates of interest results in the addition of cash demanded and therefore the currency is appreciated while this increases the fiscal deficit and depressing the outputs got, which both are likely to cause the currency to decrease in value (Houdou, 2017).

2.4 Empirical Review

Kang, Khaksari and Nam (2018) studied the correlation between investment corporately and in the short-term return reversal by taking into consideration the impact of corporate investment in altering the availability of items. The study realized that the reversal of short-term returns was less impactful in the items with a corporate investment which is high. The findings then revealed that corporate investment clearly influences the short-term

reversal effect without putting into consideration the other factors. The research finalized that the findings are connected to the impact of corporate investment on the risks associated with stock in which the investment in the corporate world encourages the availability of items and finally results to a weak short-term reversal return. The research, however, was keen on the investment decision and the availability of items but did not consider the returns on stock.

Efni (2017) from Indonesia, studied the influence of decisions on mediation on investment, and the decisions on financing and how they affect the organization's risk and the policy of dividends on the worth of the company's property and real estate sector as listed in the Indonesia Stock Exchange from 2001–2008. The research used a descriptive analysis method and inferential analysis to determine the correlation between the variables of the study with the five given structural model. The result proved that risks faced by a company and its resultant decisions to invest are in a position to add to the firm's worth, while the policy of dividends and decisions to fund are not to increase the worth of that given organization. The study was keen on the decisions to invest and the decisions to finance the investment and not the expected stock returns.

Locally, Muli (2016) examined the impact of the decision to invest on the performance of a company financially of the Savings and Credit Cooperatives in Kitui Central Sub-County. This research used the empirical study design for the time-series data provide of ten years from 2006-2015. This study was conducted on all the present twelve (12) SACCOS located in Kitui Town. The findings of this research were that decision to replace, or renew and development and research all had a positive impact to the SACCO performance financially. The research also realized that the decision to extend, automate, development

and research all had a positive impact to the performance of the SACCO financially. The findings were that only research and development had a positive influence on the SACCO and that the other decisions to enlarge and replace had negative impact on the SACCO's performance financially. In this case, the focus was primarily the SACCOs and not listed firms.

Lewellen and Lewellen (2016) conducted a research on the investment choice in relation to the sensitivity of cash flow in the US organizations from 1971–2009. The study findings were that there was a strong flow of cash which elaborates investment more than its relation with Q. the research realized that a dollar of current-and before- year flow of cash is linked with \$0.32 of increased investment for the organization and are very less likely to be held and \$0.63 of increased investment which tends to be limited, after correcting the Q error in measurement. The study summarized that the limitation encountered during financing and the flow of cash problems are significant for the decision to invest to be made. The research was keen on the impact of investments on the flow of cash as compared to the returns on stock.

Mukanzi, Mukanzi and Maniagi (2016) determine the effect of financial risks on the return of stock for the no-financial companies in Nairobi Stock Exchange. The research used a quantitative design and utilized secondary data from a given sample of forty six non-financial firms located in Nairobi in January 2016. By use of the model of regression, the findings determined that the risks of businesses and credit all had a negative relationship which was still important on the returns of stock expected. The study established that the availability of risk had a strong relationship which was a key factor in stock returns of

these non-financial companies registered at the NSE, in conjunction with the finance markets that are weak. The study was majorly keen on the financial risks rather than the investment on returns on stock.

Ogilo and Ali (2015) examined the impact of performance of a company on the investment decisions for the companies that have been registered as lagged in the Nairobi Security Exchange. The research design utilized was descriptive and the sample was twenty- four organizations. The research used the two estimates of regression; the inclusivity of the previous investment decisions that are considered lagged then the differentiating method to test the effectiveness of the test and the company's fixed effects. The study determined that the assets return and growth have a strong correlation with those decisions to invest that have lagged behind, while, the flow of cash had an undesirable effect of lagging the decisions to invest for the organizations registered by the NSE. The study however reflected the decision to invest and the organization's performance rather than the returns on stock.

Ogawa (2015) examined the relationship between how companies reacted to the minimization of the health of the banks at the turbulent periods financially in the 2000s in decion making of investment as well as in balancing the growing need for available cash. The study determined the various functions analyzed the different roles played by internal funds in the financial and investment policy of firms in a financial environment with different stages of development. The study found that the cash flow sensitivity of investment and cash holdings rises as bank health deteriorates. The study also found that the impact of non-performing loans on the cash flow sensitivity of investment and cash holdings is more prevalent across firms, irrespective of firm age, in countries with a higher level of financial intermediary development.

Omet and Yaseen (2015) investigated the investment behavior of listed Jordanian industrial firms during the period 2000-2013. Based on the financial statement of 52 listed industrial firms and panel data analysis, the empirical results revealed that firm investment does respond to stock market valuation (Tobin's Q). The study further revealed that firm's leverage does not have a significant effect on firm investment. The study concentrated on investment behaviors and leverage leaving out investment and stock returns.

Machuki (2014) explored the effect of investment decision on the performance of firms listed in the Nairobi Securities Exchange. The study employed a descriptive research design. The study targeted 61 companies listed at the Nairobi Securities Exchange. The study adopted a census approach and utilized panel data approach, which consisted of time series and cross-sections. The findings found significant and positive correlations between ROA and investment decision, financial leverage and liquidity but the focus of the study was investment decisions and firm performance as opposed to stock returns.

In their study, da Silva et al. (2013) examined empirically the relation between past investment and profitability. Data from the financial statements of non-financial companies listed on Brazilian Stock Exchange was collected from 2001 to 2011. The results revealed a positive relation between contemporary investment and profitability, and a negative relation between past investment and profitability while the relation of past investment with the profitability (using Tobin's q) was positive. This study examined investment and firm profitability and not investment and stock returns.

Kiget (2014) assessed the capital budgeting techniques adopted by companies listed at the Nairobi Securities Exchange. This study applied a descriptive study design, sample size of 42 firms was selected from a total population of 62, and primary data collected using a questionnaire. The study found out that the companies had a clearly defined process governing capital budgeting. The study further found out that the most utilized capital budgeting method was internal rate of return followed by net present value technique. Profitability index technique was third while present- value technique was fourth. Other techniques utilized included discounted payback technique, accounting/average rate-of-return technique and modified internal rate of return (MIRR) technique. This study however focused on capital budgeting techniques as opposed to fixed capital investments and stock returns.

Maiyo (2013) investigated the impact of investment decisions on performance of companies quoted at the Nairobi Securities Exchange. The study adopted a descriptive survey design and the population consisted of all forty companies listed at the Nairobi Securities Exchange. Using simple regression analysis, the study found out that there was a positive relationship between the invested amounts and performance of the listed companies. The study however examined the relationship between performance of the listed firms and investments and not stock returns.

Martinez-Carrascal and Ferrando (2008) examined the effect of the company's decision on financial position on their investment decision through the data collected from a panel of non- financial corporations in some European countries namely; Belgium, Germany, France, Italy, Spain and the Netherlands. The findings revealed that the financial

performance of an organization is key to expound more on the expenses incurred from capital activities, as the pressure from the financial world becomes key in defining the dynamics experienced financially when it is influenced by the flow of cash, being in debt and the burden of debt. The findings also indicate the variance in the investment rates sensitivity to vary from financial pressure among the countries which was observed to have a great impact on Italy, Germany and the Netherlands. The study focused on the financial position of the firm rather than the investment and the expected returns on investment.

Cooper, Gulen and Schill (2008) conducted a study on the impact of firm-level investment in the assets in the expected returns by determining the cross-sectional correlation between the asset growth of a company and the corresponding returns on stock. The research did a comparison between the growth of assets with the formerly listed determinants of stock returns namely; book-to-market ratios, lagged returns, firm capitalization and accruals. The findings indicated that the company's annual growth of assets is seen as a statistically and economically important forecaster of the cross-section of U.S stock returns. The study specifically was keen on the growth of organizations and their stock returns with very little emphasis on the investment decision.

Li (2004) studied to determine if excessive investment could partially account for the negative correlation between long term capital investment, future profitability and the returns on stock. This study revealed that the negative correlation is more prevalent if the company's investment decision is discrete; especially for those firms with more cash flow and reduced leverage and the negative correlation is mostly caused by positive discretion on investment; where over investment is probable to occur, rather than by negative discretionary investment, where overinvestment is much less likely.

2.5 Conceptual Framework

A conceptual framework refers to a graphical or diagrammatical representation of the relationship between variables in a given study. The conceptual framework of this study will comprise of investment, which will be the independent variable while share returns will be the dependent variable. The study will also incorporate the control variables which will include dividend payout, profitability and firm size. The conceptual framework is diagrammatically depicted by figure 2.1

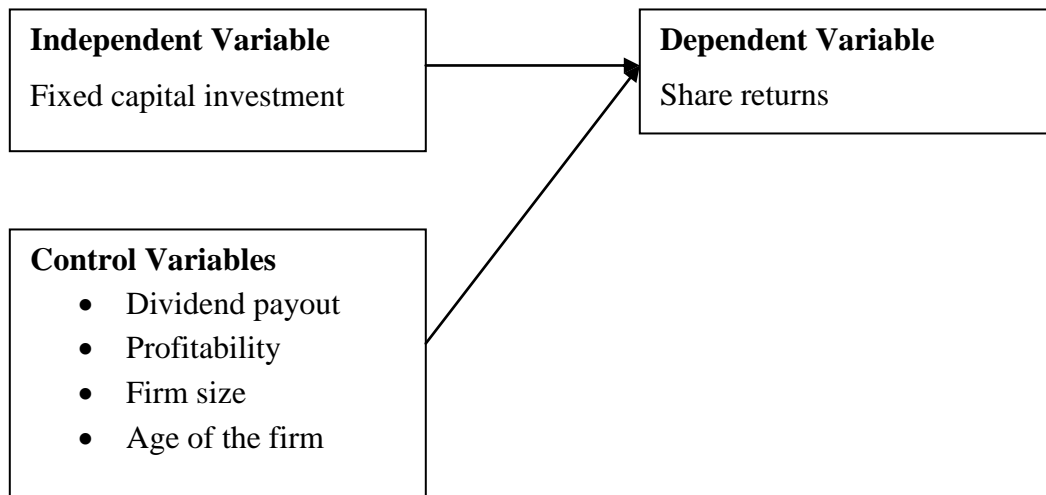


Figure 2.1 Conceptual Framework
Source: Researcher

2.6 Summary of Literature Review

The study reviewed the modern portfolio theory, which states that investing in more than one stock, an investor can obtain the benefits of diversification, a reduction in the volatility of the whole portfolio. The q theory of investment states that lower returns and lower stock prices will result in decreased capital investment and the resulting ability of stock returns to predict capital investment growth. Finally, according to the signaling theory supports that increased investment expenditures can provide both favorable and unfavorable information.

A number of studies were reviewed under the empirical literature review; however, most of the studies focus investment and liquidity with other concentrating on investment, and financing decisions on dividend policy and firm value. From the reviewed international studies its evident that most focus more on investments and firm's performance and not stock returns. For the local studies, most studies focus on investment decision in non-listed firms like Sacco's and the various capital budgeting techniques adopted by the firms. The reviewed studies from Kenya also focus more on investments and financial performance and not stock returns.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The methodology section presents research design, the study population, and the methods of data collection, and finally the technique of data analysis comprising of the analytical model, the diagnostic tests and significance tests.

3.2 Research Design

A research design refers to schematic guideline that illustrates systematically how a study will be carried out to answer the research questions posited by the study given the current state (Troachim, 2009). This study seeks to assess the relationship between fixed capital investment and stock returns of firms listed at the Nairobi securities exchange. The study therefore adopted a descriptive research design. Descriptive studies are concerned with the what, where and how of a phenomenon hence more placed to build a profile on that phenomenon. The choice of descriptive research design is because enabled analysis of data to establish a pre-existing relationship and researcher will not attempt to manipulate the independent variables.

3.3 Population and Sample

A study target population is the complete enumeration of all the items/objects or individuals under consideration. The population of this study was made up of all 98 firms listed at the Nairobi Securities Exchange as at December 31st 2017.

3.4 Sample Design

This study undertook a sample of the 48 non-financial firms listed at the Nairobi securities exchange. The study excluded commercial banks and insurance firms since the study operate in a different manner as the non financial firms and also the study intended obtain an in-depth understanding of the effect of fixed capital investments on stock returns of the non financial hence a census of the 48 non-financial firms was undertaken.

3.5 Data Collection

This study used secondary data which was collected using a data collection sheet from the obtained from annual reports and financial statements of the firms listed in Nairobi Securities Exchange. The annual reports and financial statements were obtained from the Capital Markets Authority and from the websites of the individual firms. The secondary data covered a period of five years from 2013 to 2017.

3.6 Data Analysis

To analyze the collected data the study used the multiple linear regression model and the Karl Pearson correlation coefficient. Regression was concerned with describing and evaluating the relationship between a given variable and one or more other variables while correlation analysis was used to determine the strength and relationship between the variables. The Statistical package of social sciences (SPSS) aided in data analysis. The regression model was formulated as follows

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where

Y = Stock returns which will be determined as follows

$$R_t = \text{Ln} \left(\frac{P_t}{P_{t-1}} \right)$$

Where, R_t represents the stock return in the year t ; P_t is the closing stock price at the end of year t , and; P_{t-1} is the closing stock price at the end of year $t-1$, Ln means natural logs.

β_0 = Constant

X_1 = Fixed capital investment, which will be proxied using the ratio of non-current assets to total assets (NCA/TA)

X_2 = Dividend proxied by the dividend payout ratio (DPS/EPS)

X_3 = Profitability measured using the return on assets ratio ($Net\ income / Total\ assets$)

X_4 = Size of the firm measured using natural log total assets

X_5 = Age of the firm measured by log of number of years since incorporation

$\beta_1 - \beta_5$ = Coefficients of the regression equation

ε = Error term

3.6.1 Diagnostic Tests

The regression model requires and assessment of its assumptions through diagnostic tests. The study undertook the normality test, Multicollinearity tests, serial (autocorrelation tests), and the test of homogeneity of variances. Normality was assessed using the Kolmogorov-smirnov and Shapiro Wilk Tests whereas autocorrelation was assessed using the Durbin-Watson d statistic. Multicollinearity was assessed using the variance inflation factors (VIF) and the tolerance levels while test of homogeneity of variances was assessed through the Levene test and plotting of residual graphs.

3.6.2 Test of Significance

The student T test was used to test the statistical significance of the independent variables while the ANOVA F statistic was used to test the significance of the regression model. All the significance tests were carried out at 5% significance level.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter presents the findings of the response rate, descriptive statistics, correlation and regression analysis and finally a discussion of the study findings.

4.2 Response Rate

The study targets the 48 non-financial firms listed at the Nairobi securities exchange as at 31st December 2017. Out of the 48 non-financial firms, the study managed to obtain complete data from 38 firms hence making up a response rate of 79.16, which was considered adequate for the research since it was more than 50%.

4.3 Descriptive Statistics

Descriptive statistics were used to summarize data for the study using the mean, minimum, maximum, standard deviation and the measures of dispersion which included skewness and kurtosis. Table 4.1 shows the results

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Dev	Skewness	Kurtosis
Stock returns	190	-2.153	1.885	-.04703	.415783	-.266	4.813
Fixed capital investment	190	.152	.993	.59690	.224575	-.326	-1.063
Dividend payout	190	-.148	.994	.25400	.25910	.945	.267
Profitability	190	-.567	.346	.03159	.125495	-1.334	.021
Size	190	12.480	22.220	16.20868	1.939167	.557	.633
Ln Age	190	1.609	4.745	3.92815	.643563	-1.114	1.180

Source: Researcher (2018)

The descriptive statistics results on table 4.1 show that the stock returns had a mean value of -0.04703 with the minimum and maximum values being -2.153 and 1.885 respectively. The results further indicate that fixed capital investment had a mean value of 0.59690 with the minimum and maximum values being 0.152 and 0.993 respectively. The results further show that the mean values for dividend payout was 0.25400 and a minimum value of -0.148, which indicates some firm paid dividends even when they had reported losses and maximum value of 0.994 correspondingly. Profitability had a mean of 0.03159 and minimum and maximum values of -0.567 and 0.346 while size had a mean of 16.209 with minimum and maximum values of 12.480 and 22.20 whereas age had a mean of 3.92 with minimum and maximum values of 1.609 and 4.745 respectively. The kurtosis and skewness values lie within the recommended values of +2 and -2 which indicate that the variables are normally distributed.

4.4 Diagnostic Tests

The study assessed for normality using the Kolmogorov-Smirnov and Shapiro-Wilk tests, multicollinearity using the variance inflation factors, homogeneity of variances using a residual graph and linearity using a normal p-p plot. The results were as follows

4.4.1 Normality Test

The Kolmogorov-Smirnov and Shapiro-Wilk were used to assess for normality

Table 4.2: Test for Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Stock returns	.049	190	.057	.947	190	.375
Fixed capital investment	.029	190	.160	.889	190	.450
Dividend payout	.241	190	.090	.730	190	.511
Profitability	.106	190	.240	.908	190	.433
Size	.058	190	.200*	.973	190	.450
Ln Age	.141	190	.063	.899	190	.380

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Researcher (2018)

Table 4.2 shows the Kolmogorov-Smirnov and Shapiro-Wilk tests for normality. The results show that all the p values are less than the significance value of 0.05 which indicates that the data is normally distributed and that the assumption of normality has not been violated.

4.4.2 Multicollinearity Test

Multicollinearity was assessed using the variance inflation factors as shown by table 4.3

Table 4.3: Test for Multicollinearity

Variable	Tolerance	VIF	Interpretation
Fixed capital investment	.867	1.153	No multicollinearity
Dividend payout	.875	1.143	No multicollinearity
Profitability	.850	1.177	No multicollinearity
Size	.810	1.235	No multicollinearity
Ln Age	.784	1.276	No multicollinearity

Source: Researcher (2018)

The multicollinearity results on table 4.3 shows that all the Variance Inflation Factors (VIFs) are less than 10 and all the tolerance values are more than the recommended value of 0.2. The results therefore indicate that there is no multicollinearity among the independent variables and the dependent variable.

4.4.3 Test for Homogeneity of Variances

Figure 4.1 shows the results of the homogeneity of variances test

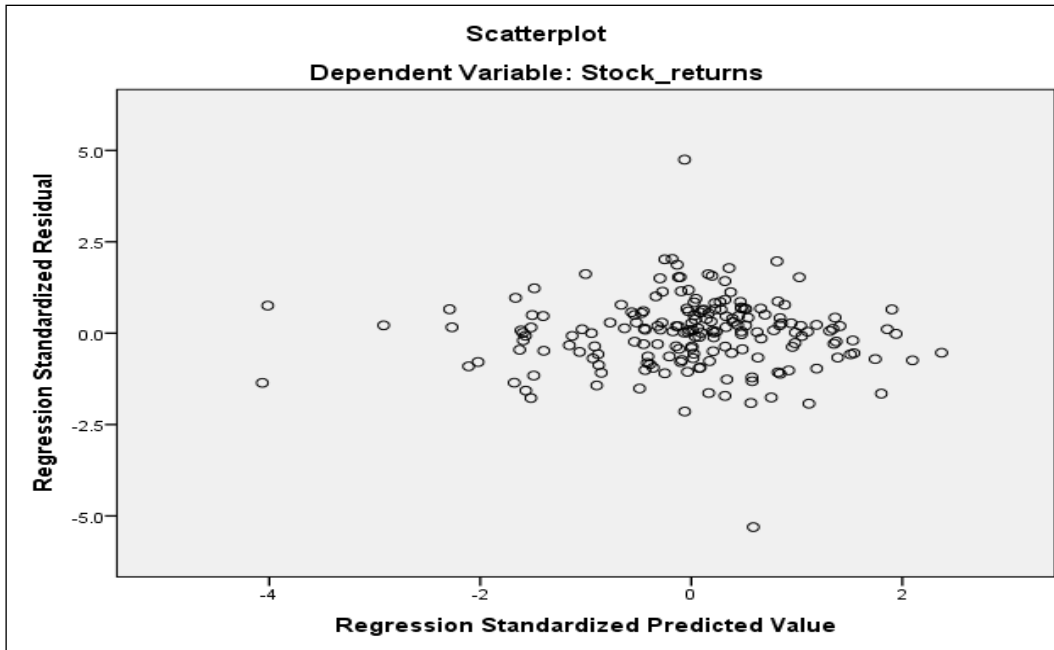


Figure 4.1: Test for Homogeneity of Variances

Source: Researcher (2018)

The standardized residuals plot on figure 4.1 show the results for the homogeneity of variance. The results indicate that the error points converge at a specific point, which indicates the absence of heteroscedasticity, and that the assumption of homogeneity of variances has not been violated.

4.4.4 Test for Linearity

The study used a normal probability plot of regression-standardised residuals to test for linearity. Figure 4.2 show the linearity results

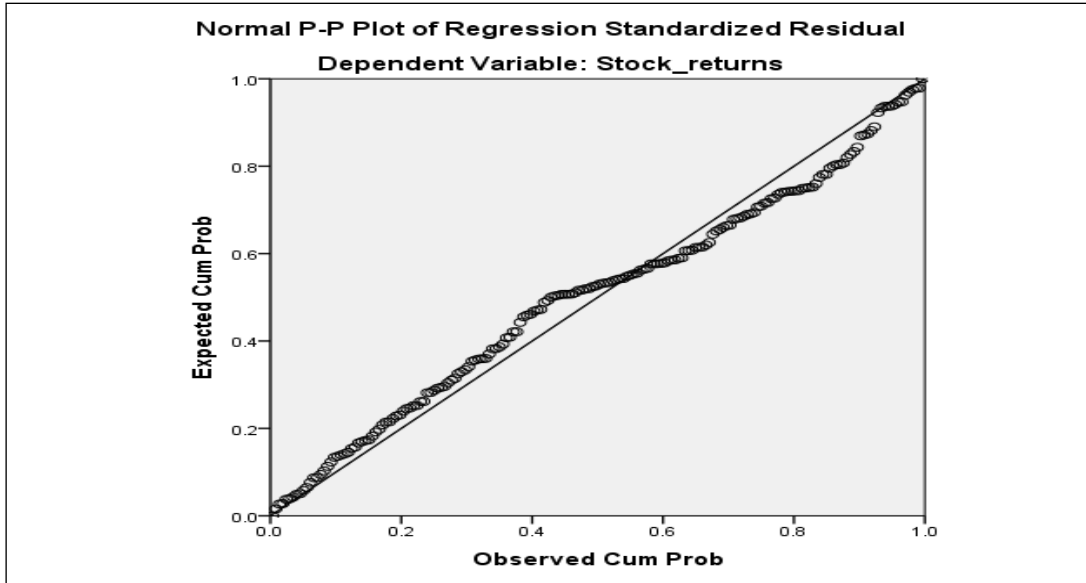


Figure 4.2: Normal P-P plot

Source: Researcher (2018)

The normal p-p plot results on figure 4.2 shows that the assumption of linearity has not been violated. The figure shows that there is a linear relationship among the study variables.

4.5 Regression Analysis

4.5.1 Model Summary

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.247 ^a	.061	.036	.408315	2.015

a. Predictors: (Constant), Ln Age, Dividend payout, Fixed capital investment, Profitability, Size

b. Dependent Variable: Stock returns

Source: Researcher (2018)

The model summary results on table 4.4 shows that the coefficient of determination value as indicated by the R square was 0.061. This indicates that the independent variables which comprise of fixed capital investment, dividend payout, age, size and profitability account for 6.1% of the variation in the dependent variable (stock returns). Thus, 93.9% is explained by other factors, which the study did not consider and the error term. The Durbin Watson statistics lie between the recommended value of 1.5 and 2.5, which indicates that the assumption of autocorrelation (serial correlation) has not been violated.

4.5.2 Analysis of Variance

Table 4.5: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.997	5	.399	2.395	.039 ^b
Residual	30.677	184	.167		
Total	32.673	189			

a. Dependent Variable: Stock returns

b. Predictors: (Constant), Ln Age, Dividend payout, Fixed capital investment, Profitability, Size

Source: Researcher (2018)

The Analysis of Variance (ANOVA) results on table 4.5 shows that the regression model is significant as the p value is less than the significance value ($0.039 < 0.05$). This indicates that the model is fit and a good predictor of the relationship between the study variables.

4.5.3 Regression Coefficients

Table 4.6: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.196	.390		-.502	.616
Fixed capital investment	-.008	.125	-.005	-.062	.950
Dividend payout	.050	.063	.061	.795	.428
Profitability	.659	.257	.199	2.568	.011
Size	-.004	.017	-.019	-.242	.809
Ln Age	.047	.052	.072	.894	.372

a. Dependent Variable: Stock returns

Source: Researcher (2018)

The results on table 4.6 led to the formulation of the following equation

$$Y = -0.196 - 0.008X_1 + 0.050X_2 + 0.659X_3 - 0.004X_4 + 0.047X_5 + \varepsilon$$

The coefficients results on table 4.6 shows that there is negative (B = -0.08) and insignificant (0.950>0.05) relationship between fixed capital investment and stock returns of listed firms in Kenya. The results further show dividend payout has an insignificant (0.795>0.05) and positive (B=0.050) with stock returns while profitability has a significant (0.011<0.05) and positive (B=0.659) relationship with stock returns. Additionally, the results show that size had a negative (B=-0.004) and insignificant relationship with stock returns whilst age had a positive (0.047) and insignificant (0.984>0.05) relationship with stock returns.

4.6 Correlation Analysis

The study undertook correlation analysis to establish the nature and degree of association among the variables of the study. Table 4.4 shows the results

Table 4.7: Correlation Analysis

	Stock returns	Fixed capital investment	Dividend payout	Profitability	Size	Ln Age
Stock returns	1					
Fixed capital investment	-.031	1				
Dividend payout	.128	-.169*	1			
Profitability	.227**	-.136	.331**	1		
Size	-.034	.140	.006	.055	1	
Ln Age	.102	.189**	.008	.117	-.358**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher (2018)

Table 4.4 shows that correlation results. According to the results, the correlation between stock returns and fixed capital was weak and negative (-0.031) while the correlation between stock returns and dividend payout was weak and positive as indicated by a correlation coefficient of 0.128 respectively. The results also show that there is a weak and positive correlation between profitability and stock returns while size and age have weak negative (-0.034) and weak positive (0.102) correlation with stock returns. The correlation values show that all the correlation values are less than 0.70, which indicates that there is no multicollinearity among the variables.

4.7 Discussion of Findings

The study found an insignificant but a negative relationship between fixed capital investments and stock returns. This is an indication that there is no significant relationship between fixed capital investments and stock returns of listed firms. The study by Efni

(2017) however established that company's risk and investment decisions are able to increase the value of the company. Muli (2016) established that replacement decision, renewal decisions and research and development decisions positively contributed to SACCO performance. Machuki (2014) found significant and positive correlations between ROA and investment decision. Titman, Wei and Xie (2009) also assessed the effect of capital investments and stock returns in Japan and found no significant relation between capital expenditures and subsequent stock returns.

The results established that the relationship between dividend payout and stock returns was positive and insignificant. The results indicate that the relationship between dividend payout and stock returns was insignificant. In their study, Elfn (2017) supports that the dividend policy and funding decisions are not able to increase the value of the company. Suwanna (2012) however using the dividend signaling theory concluded that a company decides to announce its dividend payout policy to signal the market that the firm is now processing future prospects, which will result in changing its stock prices.

In addition, the results revealed that there was a positive and significant relationship between profitability and stock returns. Thus, an indication that profitability significantly influences stock returns of firms listed at NSE. A study by da Silva et al. (2013) revealed a positive relation between contemporary investment and profitability, and a negative relation between past investment and profitability while the relation of past investment with the profitability. Suwardi, Yunita and Iradianty (2016) supports that investors will certainly only invest in companies that have a good performance in order to provide profits to them.

Further, according to the results, the relationship between firm size and stock returns was negative and insignificant. This is an indication that there is no significant relationship between size of the firm and stock returns of firms listed at NSE. In their study, Farhan and Sharif (2015) concluded that the size of the firm is negatively and significantly related to the stock return and that the stocks of firms with low market capitalizations have higher average returns than large cap stocks and also small firms tend to have higher betas than large firms. Cooper, Gulen and Schill (2008) also revealed that a firm's annual asset growth rate emerges as an economically and statistically significant predictor of the cross-section of U.S. stock returns.

Finally, the study found a positive but insignificant relationship between firm age and stock returns. This is an indication that age of the firm does have a statistically significant effect on stock returns of firms listed at NSE. Ogawa (2015) found that cash flow sensitivity of investment and cash holdings is more prevalent across firms, irrespective of firm age, in countries with a higher level of financial intermediary development.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the research, the study conclusions and the recommendations as per the findings of the study. The chapter further provides the study limitations and suggests areas, which may require additional research.

5.2 Summary

The aim of this study was to determine the relationship between fixed capital investment and stock returns of firms listed at the Nairobi Securities Exchange. The study employed a descriptive research design and the population of this study was made up of 48 non-financial firms listed at the Nairobi Securities Exchange as at December 31st 2017. This study used secondary data which was collected using a data collection sheet. To analyze the collected data the study used the multiple linear regression model and the Karl Pearson correlation coefficient. The study targeted the 48 non-financial firms listed at the NSE and out of the 48 non-financial firms, the study managed to obtain complete data from 38 firms hence making up a response rate of 79.16, which was considered adequate for the research.

The descriptive statistics findings revealed that the stock returns had a mean value of -0.04703 while fixed capital investment had a mean value of 0.59690 respectively. The results further established that the mean values for dividend payout was 0.31802 while profitability had a mean of 0.03159. The results also revealed that size had a mean of 16.209 while age had a mean of 3.92 respectively. The kurtosis and skewness values lie within the recommended values of +2 and -2 which indicates that the variables are normally distributed.

Correlation results on the other hand established that the correlation between stock returns and fixed capital was weak and negative while the correlation between stock returns and dividend payout was weak and positive respectively. The results also found that there was a weak and positive correlation between profitability and stock returns while size and age had a weak negative and positive correlation with stock returns respectively. Using correlation analysis, the study revealed that all the correlation values were less than 0.70 hence an indication of absence of multicollinearity.

The regression results revealed that the independent variables which comprised of fixed capital investment, dividend payout, age, size and profitability account for 6.1% of the variation in the dependent variable while the established that the regression model is significant as the p value is less than the significance value ($0.039 < 0.05$). The study also found a negative and insignificant relationship between fixed capital investment and stock returns while the relationship between dividend payout and stock returns was found to be insignificant and positive. The study also found that profitability had a significant and positive relationship with stock returns. Finally, the results revealed that size had a negative and insignificant relationship with stock returns whilst age had a positive and insignificant relationship with stock returns of listed non-financial firms in Kenya.

5.3 Conclusions

The revealed a negative and insignificant relationship between fixed capital investment and stock returns of non-financial firms listed at NSE. The study based on this finding concludes that there is no significant relationship between fixed capital investments and stock returns of listed firms. The study also found that the relationship between dividend

payout and stock returns was insignificant and positive. Based on this result, the study concludes that the relationship between dividend payout and stock returns of listed non-financial firms in Kenya is insignificant.

The findings revealed that profitability had a significant and positive relationship with stock returns. The study therefore concludes that profitability significantly influences stock returns of firms listed at NSE. The study results further established that size had a negative and insignificant relationship with stock returns of the listed non-financial firms. Thus, the study concludes that there is no significant relationship between size of the firm and stock returns of firms listed at NSE. Finally, the study found that firm age had a positive and insignificant relationship with stock returns of listed non-financial firms in Kenya. The study based on this finding concludes that age of the firm does have a statistically significant effect on stock returns of firms listed at NSE.

5.4 Recommendations

The study made the conclusion that there was no significant relationship between fixed capital investments and stock returns of listed firms. The study however recommends that the management of firms listed at the NSE should invest in fixed capital investments since they are used to generate sales, which increases the firms' profitability.

The research concludes that the relationship between dividend payout and stock returns of listed non-financial firms in Kenya is insignificant. The study based on this conclusion however recommends that the management of listed non-financial firms should focus on maximizing the wealth on shareholders so that they can enhance the value of the firm.

Further, the results of the study led to the conclusion that profitability significantly influences stock returns of firms listed at NSE. The study therefore recommends that the management of listed non-financial firms should work on maximizing the profitability of their firms so as to enhance the firm's stock returns.

Additionally, the study concluded that there was no significant relationship between size of the firm and stock returns of firms listed at NSE. The study however recommends that the management of non-financial firms should focus on growing their firms in terms of assets due to the economies of scale associated with size of the firm.

Finally, the research concluded that age of the firm does have a statistically significant effect on stock returns of firms listed at NSE. The study however recommends that the management of the listed non-financial firms should use the experience, which is associated with the age of the firm to enhance the firms' stock returns.

5.5 Limitations of the Study

Limited financial resources restricted the period of the study. A study covering a longer period would result in more reliable results. Old annual accounts for significant number of listed firms in the NSE could not be retrieved or be obtained, further limiting the period of the study. Moreover, the study was limited by failure of some of the firms listed in the NSE to disclose some of the required data for the study. Such firms were dropped from the selected sample and this may have impacted the results of the study.

Secondly, the study focused only on non-financial listed firms and excluded financial firms comprising of banking institutions and insurance firms. The findings therefore are only applicable to the listed non-financial firms and may not be generalized to financial institutions listed at the Nairobi securities exchange. In addition, the context of the study was Kenya hence the findings may not be applicable to listed firms in other countries.

5.6 Suggestion for Further Research

A similar study, although focusing on the relationship between investments and stock returns of listed commercial and listed financial firms should be undertaken, since the study focused only on the Nairobi securities exchange.

The model summary of the study revealed that the independent variables (fixed capital investment, dividend payout, age, size and profitability) accounted for 6.1% of the variation in the dependent variable (stock returns) hence an indication that 93.9% was explained by other factors. The study therefore recommends a study on the other micro and macro factors that may influence stock return of listed non- financial firms in Kenya.

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APPENDICES

Appendix I: Firms Listed at the Nairobi Securities Exchange

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Williamson Tea Kenya Ltd
8. Car and General (K) Ltd
9. Sameer Africa Ltd
10. Marshalls (E.A.) Ltd
11. Express Ltd
12. Kenya Airways Ltd
13. Nation Media Group
14. Standard Group Ltd
15. TPS Eastern Africa Ltd
16. Scangroup Ltd
17. Uchumi Supermarket Ltd
18. Hutchings Biemer Ltd
19. Longhorn Kenya Ltd
20. Atlas Development and Support
21. Athi River Mining
22. Bamburi Cement Ltd
23. Crown Berger Ltd
24. E.A.Cables Ltd
25. E.A.Portland Cement Ltd
26. KenolKobil Ltd
27. Total Kenya Ltd
28. KenGen Ltd
29. Kenya Power & Lighting Co Ltd
30. Umeme Ltd
31. Olympia Capital Holdings ltd
32. Centum Investment Co Ltd
33. Trans-Century Ltd
34. Home Afrika Ltd
35. Kurwitu Ventures
36. B.O.C Kenya Ltd
37. Nairobi Securities Exchange Ltd
38. British American Tobacco Kenya Ltd
39. Carbacid Investments Ltd
40. East African Breweries Ltd
41. Mumias Sugar Co. Ltd
42. Unga Group Ltd
43. Eveready East Africa Ltd
44. Kenya Orchards Ltd
45. A.Baumann CO Ltd
46. Flame Tree Group Holdings Ltd
47. Safaricom Ltd
48. StanlibFahari I-REIT
49. AAR Insurance Kenya
50. Africa Merchant
51. AIG Kenya Insurance Company
52. APA
53. Apollo Life Assurance
54. British-American

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|--|--|
| 55. Cannon Assurance Company Limited | 82. Mercantile Insurance Company |
| 56. Capex Life Assurance Company | 83. Metropolitan Life Insurance Kenya |
| 57. CIC Insurance | 84. Monarch Insurance Company |
| 58. Concord | 85. Occidental Insurance Company |
| 59. Continental Reinsurance | 86. Old Mutual Life Assurance Company |
| 60. Co-operative | 87. Pacis Insurance Company |
| 61. Corporate Insurance Company | 88. Pan Africa Life Assurance |
| 62. CFC Life | 89. Pioneer Assurance Company |
| 63. Directline Assurance Company | 90. Phoenix of East Africa Assurance Company |
| 64. East Africa Reinsurance Company | 91. Real Insurance Company |
| 65. Fidelity Shield Insurance Company | 92. Resolution Insurance Company |
| 66. First Assurance Kenya Limited | 93. Takaful Insurance of Africa |
| 67. GA Insurance Company | 94. Tausi Assurance Company |
| 68. Gateway Insurance | 95. The Monarch |
| 69. Geminia Insurance Company | 96. Trident Insurance Company |
| 70. Heritage Insurance Company | 97. UAP Insurance Company |
| 71. ICEA LION Insurance Company | 98. Xplico Insurance Company |
| 72. Intra Africa Assurance Company | |
| 73. Invesco Assurance Company | |
| 74. Jubilee Insurance Company Limited | |
| 75. Kenyan Alliance | |
| 76. Kenindia Assurance Company | |
| 77. Kenya Orient Insurance | |
| 78. Kenya Reinsurance Corporation | |
| 79. Liberty Life Assurance Kenya Limited | |
| 80. Madison Insurance Company Kenya | |
| 81. Mayfair Insurance Company | |

Source: KNBS (2017)

Appendix II: Data Collection Sheet

Company _____

Year	Stock prices	Non current assets	Total assets	Total dividends	Net income	Age	CPI	GDP	Lending rates
2008									
2009									
2010									
2011									
2012									
2013									
2014									
2015									
2016									
2017									