## THE EFFECT OF DIVIDEND POLICY ON THE SHARE RETURNS OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

#### DECLARATION

I, the undersigned, declare that this project is my original work and it has not been presented in any other University or Institution for academic credit.

Signature..... Date...... Wambui S.E.W D63/68487/2013

This research project has been submitted for examination with my approval as the university Supervisor:-

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#### ACKNOWLEDGEMENT

First and foremost I want to give thanks to my heavenly father for giving me the strength to have made it all through.

I would also like to express my sincere gratitude to my supervisor Dr Mirie Mwangi (PhD) for his supervision during this research project ,his patience in reading the various drafts and guiding me, without which the research would not have been a reality.

### **DEDICATION**

I would like to dedicate this study to my family, for their backing, encouragement and patience during the entire period of my study and for their continued prayers towards successful completion of this course.

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## LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
САРМ	Capital Asset Pricing Model
CAR	Cumulative Abnormal Returns
CER	Cumulative Excess Return
СРІ	Consumer Price Index
DAX	Deutscher Aktien Index
IFC	International Finance Corporation
IPO	Initial Public Offering
MAAR	Market Adjusted Abnormal Returns
NASI	Nairobi Securities Exchange All Share Index
NPV	Net present Value
NSE	Nairobi Securities Exchange
NYSE	New York Stock Exchange
ROE	Return on Equity
ROI	Return on Investment
USA	United States of America
SPSS	Statistical Package for Social Sciences

#### ABSTRACT

The effects of dividend policy on share returns has remained an unsolved puzzle with different theories put forward giving compelling yet conflicting arguments. The research set out to determine the effect dividend policy has on share returns of companies listed at the Nairobi stock exchange. The study employed a descriptive research design. The population of the study consisted of all 65 organizations registered at the NSE. The sampling frame consisted of all actively trading companies that were listed at the NSE as at the end of 2015 and had had paid dividends in the preceding 5 years. During the study period there were 31 companies that had given out dividend, which formed the sample size of the study. This sample accounted for about 47.7% of the 65 listed companies at the NSE. The sampling period was 5 years from 1<sup>st</sup> January 2011 to 31<sup>st</sup> December, 2015. The research used quantitative secondary data. The data sources included all share return for NSE listed firms for the period in question, NSE handbook, and company's annual reports for the study period. The study used the average returns throughout the year. This research employed inferential and descriptive statistics to analyze the data collected. This study established that although dividend payout ratio positively contributed to share returns for firms listed at NSE in 2011-2015 period, this contribution was not statistically significant. The same case applies to capital structure .Firm size had a positive relationship with share returns and this relationship was statistically significant and the same applied for inflation. Each year analyzed separately yielded different results with 2012 and 2013 showing that dividend payout ratio positively contributed to share returns. Capital structure was also found to positively contribute to share returns in 2012. Firm size was also found to positively predict dividend payout ratio for 2011-2015 period. Based on the findings, this study concludes that since dividend payout ratio has a positive contribution to share returns for listed firms at the NSE, it can be used to increase value of a firm. The study also concludes that since capital structure (debt to equity ratio) and firm size have positive contribution to share returns for firms listed at the NSE, they can be used to leverage the stock prices. Cross-sectional and longitudinal data show different results for dividend payout ratio and capital structure. Firm size can be used to predict dividend payout ratio and by extension share returns for firms listed at the NSE. This shows that large firms are likely to have high stock prices than their smaller or medium counterparts. This study having shown the association between share returns and dividend payout ratio, recommends that management and board of directors the appropriate dividend policies so as to satisfy shareholder goal of should adopt maximizing their return. The study also recommends that investors and investment analysts should take advantage of positive contribution of dividend payout ratio and its effect on the shares prices of firms listed on the NSE to make informed investment choices. Further research should cover a longer period to establish effects of dividend payout on share returns for firms listed at the NSE.

# CHAPTER ONE INTRODUCTION

#### 1.1 Background of the Study

The significance obtained from dividend policy in the corporate world cannot be underscored and researchers have in the past given the issue some considerable attention in their research. The fundamental issues forming part of the financial management are achieved by the formulation of dividend policy. Various stakeholders, among them stock investors, managers, lenders, financial consultants/analysts look at the dividend policy of a firm to inform them in making well-versed decisions. For most stock investors their primary reason for investing in equity shares is the maximization of the expected return at risk levels that are optimally low; these expected returns are in terms of capital gains or dividends. The primary objective of the corporate managers is the maximization of the shareholders' wealth by ensuring that they take optimal investment and financing decisions that lead to an increased firm's value which is shown by the organization's common stock price (Agarwal & Hauswald, 2006).

Firms in their financing decisions can decide to either use internal or external sources of funding. Under internal sources the firm uses it retained earnings to fund its profitable ventures, how much of the internal funds are available for reinvestments is affected by the dividend policy adopted by the firm, thus we can say that wealth maximization for the shareholders is dependent on the dividend policy adopted by a firm (Khan, 2012).

The twenty-first century has seen dividend policy as a major financial policy mostly used by companies in their bid to maximize the wealth of their shareholders (Baker & Kent, 2009). Whereas different researchers have increasingly emphasized on dividend policy, there has

been no acceptable universal inference on the issue and empirical analyses by different researchers have led to mixed results. Black and Scholes, 1974 suggests that in regard to divided policy, the divided depiction looks more like a tangram with pieces that do not fit into each other. This sentiment is similar to Brealey and Myers (2002) who notes that the policy on dividends is among ten most difficult unresolved problems of financial economics.

#### **1.1.1 Dividend Policy**

Dividend policy can be elucidated as an exercise followed by an organization's management when making the dividend payout decisions to their shareholders which involves deciding on what fraction of earning to pay out, when to pay it out and in what form to pay it (Lease *et al.*, 2000). Dividend policy defines the percentage of a company's profit that are rewarded to the shareholder and the pattern (Bitok *et al.*, 2010).

The most common types of dividend policies that exist in the corporate world are four as Pandey (2010) explains; residual dividend policy outlines for dividends to be paid out when profitable investment opportunities are not available; stable dividend policy where a constant amount per share is paid out from period to period regardless of earning; Hybrid dividend policy where constant amount per share in addition to extra amounts that are defined by the profits of a firm and its constant payout ratio dividend policy where a constant percentage of company's earning is paid out and the value of dividend only changes as a result of profits.

Dividend are paid out in the forms of cash, bonus or stock dividends. A prerequisite for a firm to pay out cash dividends is liquidity. However, in liquidity constrained firms they could still issue dividend but in the form of bonus issue where added shares are allotted to the present shareholders in the proportion of their existing ownership for no cash payment. This

encompasses the capitalization of retained earnings (Pandey, 1991). Stocks dividends, a firms buys back its outstanding shares and in place of paying out dividend in cash. This means that shareholders essentially get cash payments as capital gains as opposed to dividends. The effect of share repurchase is that the number of outstanding shares reduces and assuming the financial performance of the company remains constant, the per share earnings increases and consequently its market price (Hirt, 1980).

In the corporate world, dividend policy is considered a central financial decision since it outlines to the firm what it should distribute to its shareholders and what it should retain for investment in the available positive NPV projects ,it's therefore important for a firm to balance between what it distributes as dividends and what it retains for future reinvestment (Ilie, 2012).Dividend policy has continued to be a controversial subject with most of these scholars coming up with different theories on why firms should or should not pay dividends. However, despite the much research and debate on the issue, the reason and impetus for paying dividends has remained a puzzle (Haugen & Baker, 1996).

The dividend policy of any corporate is determined either by the dividend yield or the dividend payout (Bitok *et al*, 2010). The yield on dividends is expressed as the quotient of cash dividends currently relative to the stock market price. The payout ratio for dividend is expressed as a ratio between dividends for each share to the earnings for each share of that company in any given year, and expressed as a percentage. The payout ratio for dividends is taken to be an acceptable measure of the dividend policy since it captures the percentage of dividends paid out to total earnings (Bitok *et al*, 2010).

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#### 1.1.2 Share Returns

Kothari and Warner (2005) defined share returns as a combination of dividend yield and capital gain yield. Share returns are the profits or losses that investors generate from holding a stock. Share return refers to any gain or loss derived from both price changes and any income that the investment pays off to an investor over time. In other words, the capital gains plus the dividend received against that share. Capital gain of a share is defined as price appreciation of a share over time, it is computed as the variance between the existing market price per share on the stock market and the purchase price of that share. (Capstaff, Klaeboe and Marshall, 2004).

There are two types of return to a shareholder; one is the dividend that is distributed when a firm makes profits and the other is capital gains that are achieved when an investor trades in their stocks in the secondary market where they earn by selling off their shares at a higher price than they initially paid to acquire them. Share returns are not equal for investors with the same stocks for they are dependent on the amount of risk that an investor is willing to take and also on an investors' knowledge and analysis of the stock market (Ward , 2008). Share return is an important consideration to most shareholders as the primary goal of any investor is the maximization of their wealth especially when they plan to hold their investment portfolio for a long time (Khan, 2012).

Share return is measured by the total shareholder return or simply total return, it is a measure of the performance of a firms' shares over a period of time. It takes in to account share price appreciation and cash flows as dividends paid so as to arrive at total returns to the shareholder which is then expressed as an annualized percentage.

#### **1.1.3 Dividend Policy and Share Returns**

Dividend policy's effect on the share returns have remained a very controversial topic with two main schools of thought putting forward compelling arguments to support their proposition of the effects. According to one of the schools of thought the amount of dividend paid to shareholders is irrelevant. According to this school of thought, whether a company pays dividend or retains their profits for future reinvestment is irrelevant as a company's value is not determined by how income is distributed but rather it's on how it is invested to generate wealth for its shareholders. Yet another argument argues that a firm's whole value increases if the management decides to reinvest extra funds rather than giving out dividends. Capstaff et al. (2004) points out that the price of shares is inclusive of retained earnings. In situations where a firm chooses to retain their earnings as opposed to paying out dividend raises the share price. Advocates of no dividend argue that the alternatives that a firm can undertake rather than giving out dividends include repurchasing the firm own shares, procuring new assets and companies, investing in profitable projects and financial assets which would otherwise maximize shareholders wealth and payment of dividend is an opportunity cost (Khan, 2012).

The second school of thought puts forward the argument that dividend payouts are important and that the actually affect the share returns regardless of the level that is paid. According to Gugler and Yurtoglu (2003) companies that are growing in most cases pay lower dividends and in many instances reinvest their earnings in new profitable projects and also finance the company's expansion activities, which leads to increased capital. Such firm's investors are usually the ones in the higher tax bracket who have no immediate need for cash who are ardent on reducing their tax burden. Companies with an enduring history of stably paying out dividends would be undesirably affected by a decreased or lack of payout on dividends; while in another instance increased or additional payout on the dividend would positively affect the company. More often than not you find that companies that have no existing dividend policy are in most cases viewed more favorably once they declare that they will give out a dividend (Khan, 2012).

The market views on dividend as a sign of growing financial and earnings muscle and inclines to an enhanced stock price and consequently the returns (Balke and Wohar, 2006). The efficient market theory elucidates the correlation existing between the stock prices and the publicly provided information in the market. According to the theory, the publicly provided market information is reflected in the share prices and if there is any new information that is of any economic value in public domain is immediately reflected in a balanced manner (Ling et al, 2008). According to some scholars, dividends are important due to their value in terms of information. According to the financial signaling theory divides are used as sources of information, this information and not the dividend itself is what affects the price of shares. Litzenberger and Ramaswamy (1979) used a definition based on a short-term yield in dividend and they established that a positive association between stock returns and dividend policy exists.

#### 1.1.4 Listed Firms at the Nairobi Securities Exchange

Listed firms in Kenya refer to any company whose stocks are traded at the NSE. By 31<sup>st</sup> December 2015, companies listed at the NSE were categorized into 14 (fourteen) economic sectors: Agricultural, Automobile and Accessories, Telecommunication and Technology,

Real Estate Investment Trust, Banking, Commercial Services, Construction and Associations, Energy and Petroleum, Insurance, Investment services, Real Estate Investment Trust, Investment, Allied, Telecommunication and Technology and Manufacturing (NSE hand book 2015).

Founded in 1954, Nairobi Stock Exchange (NSE) started off as an organization of stock brokers who voluntarily carried out their mandate and is currently ranked among the most vibrant capital markets in Africa representing more than 90% of the market activity in the East African region and acts as a reference for the best standards for other existing markets in the region. However, in the recent past, the NSE has witnessed slow growth in the number of listed firms.

Nairobi Securities Exchange All Share Index (NASI) had positive total returns in the period 2008-2015 both when held at price change (no dividend re-investment) and with dividends re-invested in the index. NASI had negative total returns in the period from January 2015 to December 2015 mainly attributed to rise in interest rates in both domestic and international market and also due to depreciation of the Kenya shilling against the dollar (Edwin, 2016).

The various firms listed at the NSE, their dividend policy has been inconsistent and sectorial based. Firms in different sectors are faced with diverse microeconomic factors and are likely to exhibit different payout ratios. For instance, the agricultural sector in the period (2008-2015) has had a consistently low dividend payout while the banking sector have exhibited relatively high payouts in the same period. It is of importance though to note that every firm is likely to be attractive to patrons preferring their policy on dividend. For instance, investors in fast-growing, high investment organizations are primed to receive low dividends with the

hope of gaining higher capital. Policy on dividend is viewed as an imperative indication of a organization's performance and hence when there is need to change the policy, the change should be gradual to avert sending of erroneous signal about the firms to the market (Edwin, 2016)

#### **1.2 Research Problem**

The effects of dividend policy on share returns has remained an unsolved puzzle with different theories put forward giving compelling yet conflicting arguments. A myriad of questions has been asked about the dividend policy of a company among them the linkage that exists between a company's stock returns and its dividend policy. This has continued to be a controversial despite theoretical and empirical research done on the subject over the years. Research has driven the development and documentation of many theories that try to give an explanation on how relevant or how irrelevant dividend policy is and different authors have arrived at diverse outcomes on importance of dividend policy and how it affects a firm's share return (Argawal and Hauswald, 2006). The study by Linter (1956) trailed by that of Miller and Modigliani (1961), demonstrates policy on dividend remains controversial.

Firms listed at the NSE have had positive share returns over the recent past and are consistently looking to increase them despite the external market shocks thereby making the NSE an appealing market for long-term oriented investments. It is imperative for managers of listed firms to identify the optimal dividend policy which can maximize shareholders' share returns while subsequently increasing the organization's value (Gugler and Yurtoglu, 2003).

Azhagaiah & Priya (2008) in their research on dividend policy's impact on shareholder's wealth in India during 1996 to 2006 concluded the momentous bearing that dividend policy had on shareholder's wealth of organic chemical companies whereas the impact remained insignificant on the wealth of shareholders of inorganic chemical companies.

Enhardt (2013) concluded that relationship between dividend policies and share prices and consequent share return existed. The study appreciated the impact firms' dividend policies had on the market value of shares including those in perfect capital markets. The study furthermore proposed that current dividend was favored to future capital gains by shareholders. This was based on the reasoning that future business conditions are indeterminate. Additionally, the study pointed out that there was a positive association between market values of shares and dividend policies even in circumstances where the internal rate of return and the predicted rate of return were the one and same.

Mbaka (2010) found out that dividend announcements by companies had an impact on the market prices and consequently returns. This impact however was skewed to the type of announcement information. Dividend announcements had affirmative impact for companies whose dividends increased while the effects were contrary for companies whose dividends were decreasing. Companies with no change were found to have varied responses to the announcement of dividends.

Ogolo (2012) found out that there was noteworthy positive correlation between shares market price and the two main measures of dividend policy which are dividend payout ratio and earnings per share. She established that policy on dividend had a noteworthy impact on the share price and consequent return of multinationals while the effect was insignificant for local firms. Otieno (2015) found an insignificant positive relationship between dividend and stock returns policy of commercial banks listed at the NSE among them multinationals and locals. Nyamosi & Omwenga (2016) found a positive substantial relationship between dividend policy and price of shares of listed Manufacturing & Allied organizations at the Nairobi Stock Exchange.

Black (1976) characterizes the lack of congruence on the subject of the effect of dividend policy on share return by asserting that, the more we focus on the dividend representation, the more it appears like a conundrum whose pieces won't just fit together. These different schools of thought raise the question; what effects does dividend policy have on share return for organizations listed at the Nairobi Stock Exchange?

#### **1.3 Research Objective**

The research sought to establish the effect dividend policy has on share returns of organizations listed at the Nairobi Securities Exchange.

#### **1.4 Value of the Study**

The findings of the study regarding the effect of dividend policy on share returns of organizations listed at the Nairobi Stock Exchange will be benefit different stakeholders including;

Management and board of directors: Managers will get to understand the association between share returns and the dividend policy if any exists. This will inform them in the formulation of their dividend policies. The Board of directors on their part will get the effects of announcements on dividends and the value of information placed on dividends and use it convey important information to shareholders. This will inform both the management and board of directors in their decision so as to satisfy shareholder goal of maximizing their return.

Investment analysts: They will find the conclusions of this study useful as they will get to understand the underlying relationships between dividend policies and use that information while doing analysis on viable investments in order to inform their clients. Their informed analysis will increase their credibility thus growing their clientele.

Scholars and Academicians: this group would benefit from the study as they will use the findings of the study as a base for conducting additional research on this matter of study which will see an addition of knowledge in the area of dividend policy relationship with share returns.

Investors: investors who seek to know how dividend policy affects the shares prices of firms listed on the NSE will greatly benefit from the study as they will be able to make informed investment choices.

# CHAPTER TWO LITERATURE REVIEW

#### **2.1 Introduction**

This chapter takes an in depth study on available literature, publication and information from accredited researchers and scholars that are related to the problem of the study. Different literature from various authors and scholars will be reviewed which evaluates the effects dividend policy has share return of organizations listed at the NSE, theoretical review of identified literature will be covered in this chapter, effects dividend policy has on the share return, empirical review of identified literature and its subsequent summary.

#### **2.2 Theoretical Review**

There are several theories albeit controversial that have made an attempt at elucidating the relationship between dividend policies and share returns. These theories have put forward inconsistent opinions on the subject of dividend policy effects on company shares valuation. One school of thought purports that dividend policy does affect a firm's valuation while another school of thought suggests that it doesn't have a momentous effect on share valuation. The two schools of thought have been extensively studied. This study will be guided by the dividend irrelevance theory, tax differential theory and the theory of a bird in the hand.

#### **2.2.1 Dividend Irrelevance Theory**

This theory originated from Modigliani and Miller (1961). It puts forward the argument that a company's policy on dividend does not bother investors since they can sell a percentage of their equity portfolio if cash was needed essentially indicating that issuing out of dividends would have little or no effect on price of stock and consequently returns. This theory suggests that the use of a dividend policy by a firm is of no significance as such a policy has got no consequence on the organization's cost of capital or the company's share price. The following assumptions forms the basis of the MM argument: corporate or personal income taxes do not exist; stock transaction and flotation costs are not in existence; there is no existing effect dividend policy has on cost of equity for organizations and managers and investors have similar information in regard to investment opportunities they need to make in the future (Jensen & Meckling, 1976).

On the basis of the above assumptions incase a firm gives a higher divided, the firm must also sell more shares to new investors of the company. The ration of the value of the firm assumed up by new investors is equal to the dividends paid out and hence it does not change the firm's value .It can therefore be concluded that firm's value is be based on its investment policy rather than its dividend policy. In other words, it is the asset investment policy, rather than the way earnings are riven between dividends and retained profit, that determines the value of the firm and consequently the return to an investor.

#### **2.2.2 Tax Differential Theory**

Litzenberger and Ramaswamy (1979) argued that, if the dividend payout ratios were low, it would lead to an increased stock price and a lower cost of capital. This means that a dividend payout ratio that is low maximizes the firm's value. This argument follows an assumption that taxes for dividends are much higher compared to the taxes from capital gains. Further the taxes on dividends are immediate while stock taxes are only incurred after the sale of the stock. Thus dividends are unattractive compared to capital gains due to the tax advantage associated with capital gains and therefore you find investors tend to prefer firms who choose to not pay out their earnings as dividends but rather retain them and they are ready to pay companies that have a lower dividend payout ratio a premium (Bhandari, 1988).This theory shows the significance and impact dividend policy has on the share value and consequent returns to the shareholders since they prefer capital gains to current dividends.

#### 2.2.3 Bird in the Hand Theory

This theory states that dividends are relevant to firm value Gordon (1962). The fundamental assumption of this theory is that the holders of equity are averse to risk and favor dividend paid in current periods .Where there is information asymmetry, dividends values are different so as to retain the capital gains or earnings. Investors would rather have the cash dividend put as the bird in hand rather than have future capital gains. He further argued that investors favored current dividends compared to anticipated capital gains due to their uncertainty resulting from information asymmetry. In the model developed by Gordon (1963) the determinants of cost of equity are future dividend, the growth rate and the current share price. The model further purports that dividend yield is more important in measuring return on equity than cost and that in determining the value of an organization, dividends are most appropriate. The growth of any firms earnings is not guaranteed and as such capital gains in the future cannot be estimated accurately. A firm that does not pay dividends will have its future market value clouded with uncertainty on whether an investor will realize anticipated

capital gains. This is based on a numbers of assumptions such as the company does not have access to external funding and therefore all funding has to come from internal sources. A sure current dividend is desirable than a promised future dividend or capital gain despite it been larger. Hence, dividend policy is relevant (Kapoor, 2009).

#### 2.3 Determinants of Share Returns

A number of causes have been identified as determinants of share return in the various experiential research conducted by different scholars in different markets. Dividend policy has been found to have an effect on share return. Different scholars have performed numerous empirical reviews on dividend policy over time. Asghar, Shah, Hamid & Suleman (2011) established that there exists significant linking between volatility of the price and dividend yield as compared to different variables. Murhadi (2008) found out that prices of stocks are positively influenced as a result of applying dividend policy. In addition to dividend policy, the other determinants of stock returns of listed firm that is relevant to this study included capital structure of a company, inflation and the size of the company as discussed below.

#### 2.3.1 Capital Structure

Capital structure denotes to the distribution of funds employed in a company by type. There are two forms of capital: debt and equity. Debt capital refers to the long term borrowed monies for use in the business which could be in the form of long term loans or debentures while equity capital refers to the retained earnings, share capital that is paid up, share premium, and reserves. The traditional theory on capital structure emboldens the use of debt by companies in its efforts to reduce WACC. At high levels of gearing the returns expected

by both shareholders and lenders increases pushing WACC higher. However, just before lenders' and shareholders' returns start to rise, shareholders' wealth is maximized and this is the point where WACC is at its minimum (McLaney, 2009)

The Modigliani and Miller (1956) theory developed without taxes showed the irrelevance of capital structure arguing that it had no influence on an organization's share return because firm's value is computed based on organizational earning capacity and on risks involving assets. The perking order theory by Myer (1984) starts with asymmetric information as managers have more information that outsiders, it goes on to say based on this asymmetry, managers favor debt to equity when they are confident that an investment is profitable. The tradeoff theory suggests there exists an optimum investment structure that maximizes an organization's value and that is achieved through a firm benefitting from tax relief cancels or minimizes the potential cost of bankruptcy. Empirical studies have found out there exists positive correlation concerning debt equity ratio of an organization together with its returns on shares.

#### 2.3.2 Inflation

Ariss (2012) defined inflation as an upsurge in the overall pricing levels of both goods and services in any economy over a defined period of time. Shiblee (2009), defined inflation as a continued upsurge in the over-all price levels of goods, and services. Inflation follows an increase in prices of both goods and services or when the purchasing power of a currency for a given food basket reduces. (Saleem, Zafar & Rafique, 2013). Inflation progressively reduces the buying power of money, hence causing a loss on moneys' worth. Arise in the inflation levels over time, decreases the value of money and return. Inflation is expressed by

computing the movement in the Consumer Price Index (CPI). Price inflation is expressed by the inflation rate, which is calculated from the annual percentage variation in Consumer Price Index.

Floros (2004) scrutinized the correlation between inflation and stock returns in Greece, the study focused on various econometric techniques to test the association, using monthly values of the Athens Stock Exchange Price index and the Greek Consumer Price index over the period 1988-2002. The results showed a positive, but not significant relationship, however, using a system of equations which included lagged values of inflation the study found a negative but not significant effect of lagged inflation on stock returns. In addition, using the Johansen cointegration test, the study found that there was no long-run relationship between stock returns and inflation in Greece and that the inflation rate was not correlated with stock returns.

#### 2.3.3 Size of the Firm

Pandey (2010) defines firm size in terms of total assets held by an organization. In theory, large companies are more diverse and benefit from a larger pool of funding sources resulting in a more improved financial structure compared to small companies. It is therefore logical for large cap returns to be less volatile than small cap returns. There are theories that elucidate the connection between size and returns. First, the Capital Asset Pricing Model (CAPM. CAPM takes in to account the risk free rate and the risk premium in the computation of the expected rate of return. The risk free rate is defined as the certain return on an asset which investors earn, while the risk premium is the supplementary return to the stockholders for a higher risk in comparison to investing in risk free assets (Sharpe, 1964).

The company size to some extent contributes to the risk premium as big companies are considered as less volatile investments (Mossin, 1966).

Wong (2010) analyzed the effect of firm size on stock return and found that the small organizations stocks obtained higher returns than large firms stocks, and the size of an organization's effect was momentous when returns with adjusted risks were controlled for variance in earnings to ratio in prices.

#### **2.4 Empirical Review**

Njeru (2015) assessed the influence dividend payout has on firms' stock prices as listed at the NSE. The incident study approach was used with a 21-day event window, 10 days before and after the dividend payment period and day 0 being the dividend payment date. The study found that share prices react negatively towards the dividend payment in all the five years. From the test of significance, payment of dividend had a statistically important influence on prices of share in all the 5 years hence confirming a negative correlation between payout of dividend and the prices of share of companies in the NSE.

Mohammed (2015) appraised the effect of dividend announcements on quoted companies' stock returns at the NSE. The study used the event study methodology. Data was collected from the NSE listing services. Abnormal returns were first determined by using the market model whereby daily stock returns was regressed with the corresponding market return on the estimation period then deducting expected returns from the daily returns. The average abnormal returns and the cumulative average abnormal returns were computed and graphs plotted for each year and for the whole study period. The empirical results showed varied

results with the overall results suggesting that there is an effect of announcing dividend on NSE stock returns.

Ndung'u (2014) examined the effect divided announcements had on Kenyan securities exchange listed firms' shares prices. The study looked at the existing relationship between dividend and price changes seeking to establish if share prices were a reflection of dividend announcement effect on stocks that were traded at the Nairobi Securities Exchange. To determine the effect of dividend announcement on the prices of shares, the event study was duly used. The calculation of Market Adjusted Abnormal Returns (MAAR) and Cumulative Abnormal Returns (CAR) around the event day was done using the Market Adjusted Abnormal Return model. Secondary data for the study was from Nairobi Securities Exchange. Analysis of the study's data was done using correlation and t-statistic. According to the outcomes of the study, there was a negative relationship between dividend announcements and share price changes for companies quoted at Nairobi Securities Exchange. The study recommended that firms should come up with their dividend policy and also give information that was helpful to investors in making the most informed decisions on their investments.

Munyua (2014) conducted a study on the effect of policy on dividend on stock prices for organizations at the NSE. In her research, descriptive research design was used from a census survey of the 61 listed firms at the NSE in the ten years between 2004 and 2013. The study used secondary data available for all firms at the NSE. The regression model used in the study had the share price as a function of dividends, profitability and leverage. The study found a positive relationship between dividend per share and the share prices and that share

prices were affected by the dividends per share paid out. Subsequently it concluded that there's a positive correlation between stock prices and dividends for firms listed at the NSE.

Waithaka, Ngugi, Aiyabei, Itunga, and Kirago (2012) analyzed how dividend policy affected share prices basing their study on firms listed at the NSE. According to the study results, investors favoured stocks with stocks that had higher dividend payouts. Further according to the study, increased trading volume of a company's stock affected the share price and investors who were in need of present investment income had shares in firms with high dividend payouts. Further, the free cash flow led to a conflict between shareholders and the management which led to an effect on the price of shares and that the executive option plan led management to reduce corporate dividends by an amount that was equal to the option plan.

Hashemijoo, Andekani and Younesi (2012) scrutinized the relationship between dividend policy and share price volatility with attention on consumer product companies listed in Malaysian stock market. They designated a sample of 84 companies from the 142 consumer product companies listed in main market of Bursa Malaysia. Employing multiple regression in a six year period (2005-2010), the findings from this study showed a significant negative relationship between share price volatility with two main measurements of dividend policy which are dividend yield and dividend payout. The study also revealed a significant negative relationship between share price volatility and firm size.

Ebrahimi and Chadigani (2011) studied about the relationship between earnings, dividends and stock prices. The population included all the Iranian companies. The study used panel data, polled and cross sectional data regression models to test the effects caused by the

20

selected variables. According to the results, the shareholders considered the price of the shares and the divided in some years. Amir and Shah (2011) did a study on dividend announcements and the abnormal stock returns. They used the event study methodology to carry out their study. The population consisted of 26 announcements made by the cement, oil and gas sectors in Pakistan. The event window consisted of 21 days pre and 21 days' post dividend announcement. They concluded that dividend announcement leads to a positive effect on stock returns of the companies at the during announcement as well as immediately after the announcement.

Muriuki (2010) study was on the relationship between dividend policies and share prices for companies listed at the NSE. A casual research design was used for this study. According to the study's results the payment of constant dividend amounts for every share was the most suitable policies for the four firms under study. The firm recommended that the Kenyan government should formulate policies that shield shareholders from the exploitation done by the management of firms. The use of a constant dividend payout ratio could result to uncertainty especially to ordinary shareholders who depend on the income from dividend and they might demand a minimum required rate of return that is higher. The recommendation of the study to the investor is that investors are better off investing in firms who pay constant dividends amounts per share together with an extra amount that is based on the firm's profitability. This constant amounts plus the extra amount makes the company flexible such that it can give out higher dividends when the firm's earnings increase and also take part in supernormal earnings.

Azhagaiah and Priya (2008) did a study on how dividend policy affected shareholders wealth in Indian chemical firms. The study revealed that there was a positive relationship between dividend policy and wealth creation for shareholders of chemical firms in India. According to the results of the study in the long run the shareholders wealth increased for those shareholders who invested in firms that paid constant dividend in comparison to shareholders who had invested in chemical companies that do not pay constant dividends. This shows how wealth creation is affected by dividend policy.

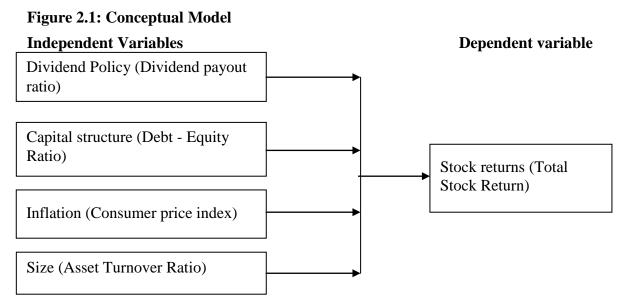
Funke and Matsuda (2006), examined the reaction of stock prices to the release of information on macroeconomic variables. They investigated the impact of 12 German and 27 USA macroeconomic news on returns of the S & P 500, Nasdaq, DAX and Nemax. They used an egarch model with daily and bi-hourly data. The results indicated asymmetric reactions of stock prices to news.

Adelegan (2003) investigated the Nigerian market for semi strong market efficiency. The study used a modified market model to determine if the stock market in Nigeria reacted to dividend announcements efficiently in regards to price adjustments. The study revealed that the cumulative excess returns (CERs) for firms that pay dividends are positive and substantial for 30 days from the day of the announcement. The conclusion was that the stock market at Nigeria was not an effective one in regard to semi strong form.

#### **2.5 Conceptual Framework**

Mugenda and Mugenda (2003) observed that a conceptual framework is a hypothesized depiction that identifies the model under study and the relationship between the dependent and independent variables. Kombo and Tromp (2006) define a conceptual framework as a set of broad ideas and principles taken from relevant fields of enquiry and which are used to structure a presentation.

The share return is the dependent variable which is affected by the independent variables; dividend policy, capital structure, inflation and size of the company. Share return is hypothesized to have a positive relationship with dividend policy (Munyua,2014), a positive relationship with a geared capital structure (Ndungu,2014), a negative relationship with high inflation (Floros,2004) and an inverse relation with the size of the company (Wong,2010).



#### Source: Researcher (2017)

#### 2.6 Summary of Literature

Despite the many theoretical and empirical studies, dividend policy has remained a source of controversy especially the relationship between dividend policy and stock return. The payment of high dividends leads to a reduction in risk which affects the stock prices and is seen as a proxy for the future earnings. There are different theoretical mechanisms that have been said to cause the inverse variation of yield on dividend and payout ratios compared to the volatility of common stock. They are information effect, rate of return effect, arbitrage pricing effect and duration effect. The agency cost argument, suggests that the payment of dividends leads to an increase in cash flows and the reduction of costs. The payments of dividends encourage managers to pay out earnings rather than reinvesting the capital below the cost of capital or putting the money in firm inefficiencies.

According to some studies the information content of dividends is important. According to Mohammed (2015) the announcement of dividends provides information that could have been missing on the firm and also allows the estimation of the firm's current earnings by the market. Investors are more confident that reported earnings are a reflection of economic profits especially when they come with good dividends.

The rate of return effect view suggests that companies that have low dividend payout and yield can be valued in better terms in regard to investment opportunities in the future. The prices of stock for such a firm might be more sensitive to chunking rates of return estimates given distance time periods. Therefore, expanding companies though they might be characterized by lower payout ratio and dividend yield, show price stability. This can be attributed to the fact that dividend yields and payout ratio serves as proxies for the growth opportunities amounts projected. Incase growth opportunities profits are less reliable compared to returns on assets in future opportunities, companies that have low payout and low dividend yield may have price volatility that is higher. The effect of rate of return show that dividend payout ratio and yields is important, Dividend policy may serve as a proxy for growth and investment opportunities.

The local studies were found to be shy away from discussing relationship between dividend policy and stock returns and focused more on the share price. A research gap therefore exists

on the effects of dividend policy on the share return of firms listed at the Nairobi security exchange in Kenya.

## CHAPTER THREE RESEARCH METHODOLOGY

#### **3.1 Introduction**

This chapter clearly states the methods that was used during the study to realize its set goals. It starts with research design, a description of the population, sample design, data collection, its validity, reliability and analytics.

#### 3.2 Research design

The study adopted descriptive research design. This kind of design attempts to describe the state of affairs, explain them and interpret conditions without any form of manipulation. As observed by Kothari (2004) descriptive research aims at inspecting a phenomenon that occurs at a specific time and place and the examiner does not have control over the factors and hence one reports the happening only. The methodology allowed for the collection of data, summarizing, presentation and interpretation of data to observe trends and relationship between the variables under study thereby allowing generalization of the outcomes to a larger population.

#### **3.3 Population**

The population of interest consisted of all 65 organizations registered at the NSE. This will include 14 Segment in Nairobi Securities Exchange (NSE) sector categorization: Agricultural, Automobile and Accessories, Telecommunication and Technology, Real Estate Investment Trust, Banking, Commercial and Services, Telecommunication and Technology, Construction and Allied, Energy and Petroleum, Insurance, Investment services, Real Estate Investment Trust, Investment, Allied, Telecommunication and Technology and Manufacturing. The study was a census survey. The sampling frame consisted of all actively trading companies that are listed at the NSE as at the 2015 that had payment of dividend in the last 5 years. During the study period there were 31 companies that had given out dividend, which formed the sample size of the study. This sample accounted for about 47.7% of the 65 listed companies at N.S.E. The sampling period was 5 years from 1<sup>st</sup> January 2011 to 31<sup>st</sup> December, 2015.

#### 3.4 Data Collection

The research used quantitative secondary data. The secondary data was related to dividend policy and share return of the firms Listed in the NSE. The data sources included all share return for NSE listed firms for the period in question, NSE handbook, and company's annual reports which provided collaborating evidence on the share return and dividend policy given to the researcher by the firms under the study and the company's annual reports the study period was from year 2011 to year 2015. The study used the average returns throughout the year.

#### 3.5 Data Analysis

This research employed descriptive and inferential statistics to analyze the data collected. Mugenda and Mugenda (2003) argued that, descriptive statistics enables the researcher to get the meaningful description of scores and measurements for the study through the use of few indices or statistics. This study used Statistical Package for Social Sciences (SPSS) to analyze the independent and dependent variables, whereby inferential statistics were applied and multiple regression models employed.

#### 3.5.1 Conceptual Model

To test the relationship between dividend policy and share return of firms listed at the NSE, a linear regression model was used which is shown as:

 $Y=f(X_1, X_2, X_3, X_4)$  .....(i)

Where;

Y- is the dependent variable

 $X_{(1...4)}$  – are the Independent variables

#### **3.5.2 Analytical Model**

To test the relationship between dividend policy and share return of firms listed at the NSE, a regression model was used which is shown as:

 $Y = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \varepsilon$ (ii)

Where:

Y = share return of firms listed at the NSE (Measured by total share return).

 $X_1$ =dividend policy of firms listed at the NSE (Measured using the dividend payout ratio in the period *t*)

X2= capital structure of firms listed at the NSE (Measured by Debt –Equity ratio at time t) X3= inflation (Measured by consumer price index (CPI) in the period t)

X4= size of firms listed at the NSE (Measured by asset turnover ratio at time *t*)

- $\alpha$  = constant term of the model
- $\beta$  = coefficients of the model

 $\epsilon = \text{error term}$ 

**Table 3.1 Variables Description** 

Variable	Description	Measurement
Share Return (Y)	Profit or losses that a	Total Share return
	shareholders gets from	
	holding a share	
Dividend policy $(X_1)$	Proportion of company's	Dividend Payout Ratio
	profit that is paid out to share	
	holders	
Capital Structure (X <sub>2</sub> )	The distribution of funds	Debt-Equity Ratio
	employed in a firm between	
	debt and equity	
Inflation (X <sub>3</sub> )	The general rise in price	Consumer Price Index
	levels of goods and services	
Size of the firm (X <sub>4</sub> )	The total assets held by a firm	Asset Turnover ratio

Source: Researcher (2017)

#### **3.5.3 Test of Significance**

The test of joint significance of all coefficients was done using the F-test and while the test of individual coefficient was done using the t-test .The significance of the regression model will be determined at 5% and at 95% confidence interval.

#### **3.5.4 Diagnostic Test**

This research is using secondary data and diagnostic tests such as shapiro-Wilk test are conducted to test for normality, Durbin-Watson test to test for independence and ANOVA to test linearity.

#### **CHAPTER FOUR**

#### DATA ANALYSIS AND INTERPRETATION

#### 4.1 Introduction

This chapter focuses on the analysis of data and interpretation of findings. It starts with descriptive statistics which are used to decribe study variables. The chapter also outlines the tests done before regression analysis to ensure assumptions for regression analysis are met. The chapter presents the regression analysis results, their interpretations and implications.

#### **4.2 Descriptive Statistics Results**

	Descriptive Statistics											
	Ν	Minimum	Maximum	Mean	Std. Deviation							
FS	155	12	20	15.98	1.629							
CS	155	-18	5	.37	1.677							
SR	155	0	20	1.01	2.069							
DPR	155	-4	1	.16	.461							
CPI	155	6	14	8.56	3.021							
	155											

Descriptive Statistics

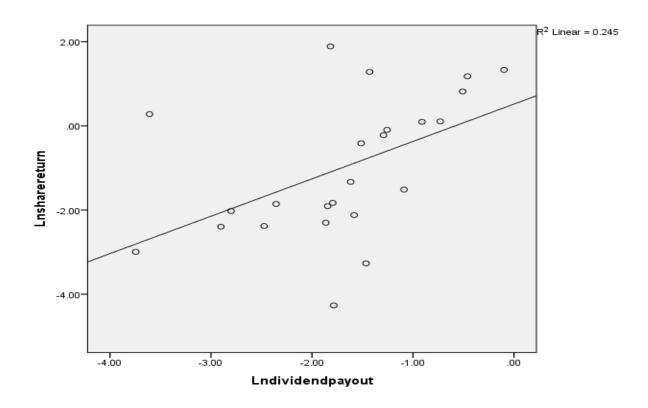
 Table 4. 1: Descriptive Statistics

Table 4.1 shows that firm size recorded a mean of 15.98 for the five-year period and a standard deviation of 1.629 with a low of 12 and a high of 20. Capital structure or debt to equity ratio recorded an average of 0.37 from 2011 to 2015 and a standard deviation of 1.677 with a low of -18 and a high of 5. Average share return for the five-year period was 1.01 and a standard deviation of 2.069 with a low of 0 and a high of 20. Average dividend payout ratio was 0.16 and a standard deviation of 0.461 with a low of -4 and a high of 1.

#### 4.3 Tests before Multiple Linear Regression

Four tests were conducted before regression analysis. These tests included linearity, normality, multicollinearity and autocorrelation.

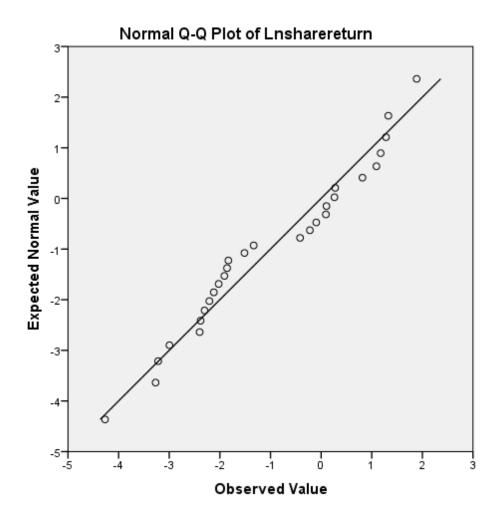
#### 4.3.1 Linearity



**Figure 4. 1: Linearity Test** 

Multiple linear regression necessitates a linear relationship between the independent and dependent variables. The assumption on linearity is tested using scatte plots. The following scatter plot depicts a linear relationship between share returns and dividend payout ratio

#### 4.3.2 Normality



**Figure 4. 2: Share Returns Normality Test** 

Multiple linear regression analysis necessitates a nornal distribution of the error terms of the oberseved value versus the predicted value. This assumption is checked using goodness of fit test, a histogram or a Q-Q plot. The normal Q-Q plot for share returns and dividend payout shows that they are from normal distributions.

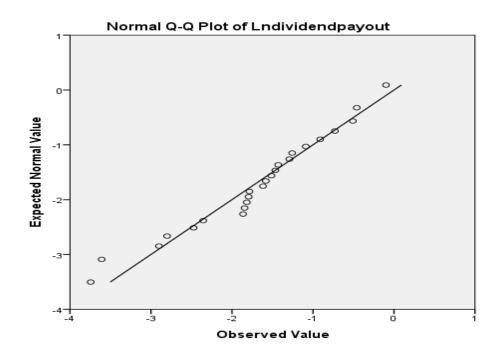


Figure 4. 3: Dividend Payout Ratio Normality Test

### 4.3.3 Multicollinearity

2011-2015		Firm Size	Capital Structure (D/E Ratio)	Share Return
Firm Size	Pearson Correlation	1	.427*	.517**
	Sig. (2-Tailed)		.017	.003
	N	31	31	31
Capital Structure (D/E Ratio)	Pearson Correlation	.427*	1	.774***
	Sig. (2-Tailed)	.017		.000
	Ν	31	31	31
Share Return	Pearson Correlation	.517**	.774**	1
	Sig. (2-Tailed)	.003	.000	
	N	31	31	31
*. Correlation is significant at the	he 0.05 level (2-tailed).			
**. Correlation is significant at	the 0.01 level (2-tailed	).		

The absence of multicollinearity in the data collected is one of the fundamental assumptions of multiple linear regression. Multicollinearity is a phenomena where the independent variables are highly correlated with each other. Multicollinearity is tested in two ways; variance inflation factor which provides an index that measures how much the variance of a given regression is of an estimated regression coefficient is increased because of collinearity and correlation matrix. When computing a matrix of pearson's bivariate correlations among the independent variables, the magnitude of the correlation coefficients should be a lesser amount than 0.8. The highest correlation coefficient among the indipendent variables is 0.774 hence we conclude that multicollinearity is abscent.

#### 4.3.4 Autocorrelation

Model	R	R Square	Adjusted R		Durbin-Watson
			Square	Estimate	
1	.554 <sup>a</sup>	.307	.197	1.49327	2.386

Table 4. 3: Durbin-Watson Test

a. Predictors: (Constant), Lndividendpayout, Lnfirmsize, Lncapitalstructure

b. Dependent Variable: Lnsharereturn

The Durbin Watson test was used to check for autocorrelation. Autocorrelation is the degree of similarity of between a given time series and a lagged version of itself which can lead to undervalues of the standard error. The Durbin Watson test reports a test statistic with a value from 0 to 4 where 2 is no autocorrelation, where the statistic is less than two there is positive autocorrelation and where greater than 2 there is negative autocorrelation. A rule of thumb is that test statistic values in the range 1.5 to 2.5 are relatively normal and those outside of this range could be cause for alarm (Field, 2009). In this case, the Durbin Watson test value is 2.386 which is within the required range hence there is no autocorrelation.

#### **4.4 Regression Analysis Results**

# 4.4.1 Share Return, Dividend Payout Ratio, Capital Structure, Consumer Price Index and Firm Size.

A multiple regression analysis of dividend payout ratio Consumer Price Index, Capital structure, Firm size as a predictors of share return for the period 2011 to 2015 show that they contributed to 4.9% of share returns for firms listed at the NSE.

#### Table 4. 4 : Model Summary

	Model Summary											
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate								
1	.220 <sup>a</sup>	.049	.023	2.044								

a. Predictors: (Constant), Consumer Price Index, Capital structure, Firm size, Dividend payout Ratio.

b. Dependent Variable: Share Return

#### Table 4.5 :ANOVA

**ANOVA**<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.029	4	8.007	1.916	.111 <sup>a</sup>
	Residual	626.986	150	4.180		
	Total	659.015	154			

a. Predictors: (Constant), CPI, CS, FS, DPR

b. Dependent Variable: SR

This prediction was found to be statistically significant (F=1.916, p=0.111). The goodness of fit in this model imply that the relationship reflects the reality and could not have occurred by chance.

**Table 4. 6: Distribution of Coefficients** 

	Coefficients <sup>a</sup>											
		Unstandardize	d Coefficients	Standardized Coefficients								
Mode	1	В	Std. Error	Beta	t	Sig.						
1	(Constant)	-3.027	1.753		-1.727	.086						
	FS	.213	.104	.167	2.050	.042						
	CS	.052	.098	.042	.526	.600						
	DPR	.314	.367	.070	.856	.393						
	CPI	.067	.055	.098	1.215	.226						

a. Predictors: (Constant), Consumer Price Index, Capital structure, Firm size, Dividend payout Ratio.

b. Dependent Variable: Share Return

The coefficient table show that for every increase in dividend payout ratio there will be a 0.314 increase in share return while for firm size for every unit change there is an increase of 0.213 in share return. The change was 0.052 and 0.067 for every unit change in capital structure and consumer price index respectively.

Coofficientsa

 Table 4. 7: Regression Analysis

			Coefficients			
		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-3.027	1.753		-1.727	.086
	FS	.213	.104	.167	2.050	.042
	CS	.052	.098	.042	.526	.600
	DPR	.314	.367	.070	.856	.393
	CPI	.067	.055	.098	1.215	.226

a. Dependent Variable: SR

Developed model  $Y = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \varepsilon$ The resultant model was :

$$Y = -3.027 + 0.314X_{1t} + 0.52X_{2t} + 0.067X_{3t} + 0.213X_{4t} + \varepsilon$$

The coefficients table show that the regression coefficient of dividend payout ratio is 0.314 meaning that a positive relationship exists. That of Capital Structure is 0.052 again pointing to a positive relationship. The coefficient for inflation is 0.067 while that of size of the firm is 0.213 both of which show a positive relationship with the prediction variable share return. For every unit change in dividend payout ratio, share return also change by 0.314 units. In addition, for every unit change in capital structure, share return will change by 0.052 while it changes by 0.067 in the case of inflation and 0.213 for firm size.

#### 4.5 Discussion of Findings

This study established that dividend payout ratio positively contributed to share returns for firms listed at NSE in 2011-2015 period, this contribution was statistically significant. The findings are in disagreement with dividend irrelevance notion by Modigliani and Miller (1961) which argues that the dividend policy of a firm does not bother investors hence issuing out of dividends have little or no effect on price of stock and consequently share returns. The same case applies to capital structure and firm size which showed positive relationship with share returns the relationships and were statistically significant. The results of this study disagree with that conducted by Njeru (2015) who found a negative correlation between payout of dividend and the prices of share of companies in the NSE. The findings of this study agree with Mohammed (2015) who appraised effects of dividend announcements

on quoted companies' returns on stock at the NSE and found that there was an effect of announcing dividend on NSE stock returns.

The findings of this study do not support tax differential theory by Bhandari (1988) which argues that shareholders prefer capital gains to current dividends. Dividend payout ratio positively contributed to share returns. The resuls contradicts those by Ndung'u (2014) who examined the effect divided announcements had on Kenyan securities exchange listed firms' shares prices where he found the relationship to be negative between changes in the share price for firms listed at the NSE and dividend announcements. This could be due to the use dividend announcements as opposed to dividend payout ratio as used in this study. In agreement with the findings of this study, Munyua (2014) findings showed a positive relationship between dividend and price per share and that share prices were affected by the dividends per share paid out. Subsequently she concluded that there's a positive correlation between stock prices and dividends for companies quoted at the NSE. The findings of this study were in line with the bird in the hand theory by Gordon (1962) which advocates for current dividends due to uncertainties of growth.

Capital structure was found to significantly and positively contribute to share returns. For liquidity constrained firms, they could still issue dividend but in the form of bonus issue where added shares are allotted to the present shareholders in the proportion of their existing ownership for no cash payment which encompasses the capitalization of retained earnings as suggested by Pandey (1991). The traditional theory on capital structure have emboldened the use of debt by companies listed at NSE in a bid to reduce WACC, as at low levels of gearing the increased cost of equity is not important. WACC is the computation of a firm's cost of capital in which each type of funding is proportionately weighted (McLaney, 2009).

Firm size was found to positively predict share returns for 2011-2015 period but the contribution of this variable was not statistically significant. The results are a contradiction of Wong (2010) observations after analyzing the effect of firm size on stock return where he found that the small organizations stocks obtained higher returns than large firms stocks. In addition, Wong (2010) found that the size of an organization's effect was momentous when returns with adjusted risks were controlled for variance in earnings to ratio in prices.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter showcases the summary of the study and deductions made from the study findings. Also, it presents the conclusions for the study and recommendations for further research.

#### 5.2 Summary of the Study

Effects of dividend policy on share returns has remained an unsolved puzzle with different theories put forward giving compelling yet conflicting arguments. The research tried to come up with effect dividend policy has on organizations share returns listed at the NSE. It adopted descriptive research design. The population consisted of all 65 organizations registered at the NSE. The sampling frame consisted of all actively trading companies that are listed at the NSE as at the 2015 that had payment of dividend in the last 5 years. During the study period there were 31 companies that had given out dividend, which formed the sample size of the study. This sample accounted for about 47.7% of the 65 listed companies at the NSE. The sampling period was 5 years from 1<sup>st</sup> January 2011 to 31<sup>st</sup> December, 2015. The study used quantifiable secondary data. The data sources included all share return for NSE listed firms for the period in question, NSE handbook, and company's annual reports for the study period was from year 2011 to year 2015. The study used the average returns throughout the year. This research used descriptive and inferential statistics to analyze the data collected. It established that dividend payout ratio positively contributed to share returns for firms listed at NSE in 2011-2015 period, this contribution was statistically insignificant. The same case

applies to capital structure while firm size and inflation had a positive and statistically significant relationship with share return.

#### **5.3 Conclusions**

The Conclusions of this study are that dividend payouts are important and they actually affect the share returns. Since dividend payout ratio has a positive contribution to share returns for listed firms at the NSE, it can be used raise value of a firm. Although a company's whole value increases if the management decides to reinvest extra funds rather than giving out dividends, the conclusions of this study imply that shareholders are not certain of growth in the future hence their appetite for current dividends.

It concludes that most investors at the NSE are usually not the ones in the higher tax bracket who have no immediate need for cash and who are ardent on reducing their tax burden. The firms with an enduring history of stably paying out dividends are therefore negatively affected by a decreased or lack of dividend payouts while increased or additional payout on the dividend payouts positively affect the firms. In addition, firms that have no existing dividend policy at the NSE will therefore be viewed more favorably once they declare that they will give out a dividend.

This study also concludes that dividend payout at NSE acts as a sign of growing financial and earnings muscle and inclines to an enhanced stock price and consequently the returns. Dividends are also important due to their value in terms of information. This is in agreement with the financial signaling theory which perceives dividend payouts as sources of information that affects the price of shares and share returns. The study concludes that since capital structure (debt to equity ratio) and firm size have positive contribution to share returns for firms listed at the NSE, they can be used to leverage the stock prices. As a result of asymmetric information where managers have more information than outsiders, managers at the NSE favor debt to equity when they are confident that an investment is profitable. This is in agreement with the perking order theory. There also seems to exist an optimum investment structure that maximizes an organization's value and that is achieved through a firm benefitting from tax relief cancels or minimizes the potential cost of bankruptcy when debt to equity ratio increases.

Firm size cannot be used to predict dividend payout ratio and by extension share returns for firms listed at the NSE. This is despite the expectation that large firms are likely to have high stock prices than their smaller or medium counterparts. Large firms are more diverse and benefit from a larger pool of funding sources resulting in a more better financial structure compared to small companies. It is therefore consistent for large cap earnings to be not as volatile as small cap earnings. This is elucidated by Capital Asset Pricing Model which expresses the connection among the size and returns. Risk free rate and market risk premium are taken into consideration when computing the expected rate of return. Risk free rate is the return on an asset which is certain to investors, while the risk premium is additional return to the shareholders for taking a higher risk compared to investing in risk free assets. Company size to some extent affects the risk premium as big companies are less volatile investments options. Nonetheless, this is in theory and does not always happen in reality as shown in this study. Infact, there are some studies that have shown the opposite happening due to other factors that make small firms more competitive and have better future prospects than large firms.

#### **5.4 Recommendations**

This study recommends that having shown the association between share returns and dividend payout ratio, management and board of directors should take the appropriate dividend policies so as to satisfy shareholders' goal of maximizing their returns. This study recommends that firms adopt hybrid dividend policy where a constant amount per share in addition to extra amounts that are defined by the profits of a firm is paid out and the value of dividend only changes as a result of profits. This way, dividends will be used as a source of information for Shareholders and a consequent increase of their returns.

The policy on dividend is central financial decision for firms at the NSE since it outlines to the firm what it should distribute to its shareholders and what it should retain for investment. It is therefore important for firms at the NSE to balance between what it distributes as dividends and what it retains for future reinvestment.

The study also recommends that investors and investment analysts should take advantage of positive contribution of dividend policies that pay out dividends and their effect on the shares prices of firms listed on the NSE to make informed investment choices. The investors should understand that at the NSE, firms that are growing in most cases pay lower dividends and in many instances reinvest their earnings in new profitable projects and also finance the company's expansion activities, which leads to increased capital.

The investors and analysts should understand that the information content in dividends is important. Dividends provides information that could have been missing on the firm and also allows the estimation of the firm's current earnings by the market. Investors and analysts therefore should have keen interest on policy on dividends adopted by firms listed at the NSE. Expanding companies though might be characterized by lower payout ratio which could serve as proxy for the growth opportunities projected.

#### 5.6 Limitations of the Study

This study covered a period of five years (2011-2015). It was not possible for the study to cover a longer period as few firms have dividend policy and share returns data of 10 years and above. All the 65 listed firms within this period did not have adequate data on dividend policy and share returns.

Incomplete data posed a challenge in analysis. Some listed firms were found to have incomplete data hence excluded for the study. Inclusion of firms with incomplete data could lead to inaccurate inferences hence the decision to exclude firms without complete data for the period under investigation. Availability of data and incomplete data were therefore limitations for this study.

Another limitation for this study was data access and costs. The data required for 2011 to 2015 could not be obtained online or from the firms easily. It was therefore sourced from the NSE which took a long time and procedure to procure the data. The costs involved in accessing the data were quite high.

#### **5.5 Suggestions for Further Research**

Further research on effect of dividend policy on share returns should cover a longer period (more than five years) to establish effects of dividend payout on share returns for firms listed at the NSE. Future scholars should establish whether there is significant difference when dividend yield in place of dividend payout ratio are used as a proxy for dividend policy.

Further research should include other firm characteristics such as firm growth rate to establish whether it controls for the effect of dividend policy on share returns. This could perhaps explain why some small firms could have higher share returns than their large counterparts. It will also perhaps explain why firm size is not a statistically significant predictor of dividend payout ratio.

Future scholars should seek to understand the moderating effect of external factors on the relationship between dividend policy and share returns. Further research should be conducted to establish the different pieces of information that dividend policy should relay to investors and analysts. Future scholars should establish a framework for optimal dividend policy based on sector and capital structure of the firms listed in a securities exchange like NSE.

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#### **Appendix I: Listed Companies at the NSE**

#### AGRICULTURAL

- 1. Eaagads Ltd Ord 1.25
- 2. Kapchorua Tea Co. Ltd Ord 5.00
- 3. Kakuzi Ord.5.00
- 4. Limuru Tea Co. Ltd Ord 20.00
- 5. Sasini Ltd Ord 1.00
- 6. Williamson Tea Kenya Ltd Ord 5.00

#### **COMMERCIAL AND SERVICES**

- 1. Atlas African Industries LtdGEMS
- 2.Deacons (East Africa) Plc Ord 2.50AIMS
- 3. Express Kenya Ltd Ord 5.00AIMS
- 4. Hutchings Biemer Ltd Ord 5.00
- 5.Kenya Airways Ltd Ord 5.00
- 6. Longhorn Publishers Ltd Ord 1.00AIMS
- 7. Nairobi Business Ventures Ltd Ord. 1.00GEMS
- 8. Nation Media Group Ltd Ord. 2.50
- 9.Standard Group Ltd Ord 5.00
- 10. TPS Eastern Africa Ltd Ord 1.00
- 11. Uchumi Supermarket Ltd Ord 5.00
- 12. WPP Scangroup Ltd Ord 1.00

#### TELECOMMUNICATION AND TECHNOLOGY

1. Safaricom Ltd Ord 0.05

#### **AUTOMOBILES AND ACCESSORIES**

- 1. Car and General (K) Ltd Ord 5.00
- 2. Sameer Africa Ltd Ord 5.00
- 3. Marshalls (E.A.) Ltd Ord 5.00

#### BANKING

- 1. Barclays Bank Ltd Ord 2.00
- 2. CFC Stanbic Holdings Ltd ord.5.00
- 3. Diamond Trust Bank Kenya Ltd Ord 4.00
- 4. Housing Finance Co Ltd Ord 5.00
- 5. Kenya Commercial Bank Ltd Ord 1.00
- 6. National Bank of Kenya Ltd Ord 5.00
- 7. NIC Bank Ltd 0rd 5.00
- 8. Standard Chartered Bank Ltd Ord 5.00
- 9. Equity Bank Ltd Ord 0.50
- 10. The Co-operative Bank of Kenya Ltd Ord 1.00
- 11. I&M Holdings Ltd Ord 1.00

#### **INSURANCE**

- 1. Jubilee Holdings Ltd Ord 5.00
- 2. Pan Africa Insurance Holdings Ltd 0rd 5.00

- 3. Kenya Re-Insurance Corporation Ltd Ord 2.50
- 4. CFC Insurance Holdings
- 5. British-American Investments Company (Kenya) Ltd Ord 0.10
- 6.Sanlam Kenya Plc Ord 5.00

#### **INVESTMENT**

- 1. Olympia Capital Holdings ltd Ord 5.00
- 2. Centum Investment Co Ltd Ord 0.50
- 3. Trans-Century Ltd
- 4.Home Afrika Ltd Ord 1.00GEMS
- 5. Kurwitu Ventures Ltd Ord 100.00GEMS

#### MANUFACTURING AND ALLIED

- 1. B.O.C Kenya Ltd Ord 5.00
- 2. British American Tobacco Kenya Ltd Ord 10.00
- 3. Carbacid Investments Ltd Ord 5.00
- 4. East African Breweries Ltd Ord 2.00
- 5. Mumias Sugar Co. Ltd Ord 2.00
- 6. Unga Group Ltd Ord 5.00
- 7. Eveready East Africa Ltd Ord.1.00
- 8. Kenya Orchards Ltd Ord 5.00
- 9. A.Baumann CO Ltd Ord 5.00
- 10. Flame Tree Group Holdings Ltd Ord 0.825GEMS

#### **INVESTMENT SERVICES**

1.Nairobi Securities Exchange Ltd Ord 4.00

#### **CONSTRUCTION & ALLIED**

- 1.ARM Cement Ltd Ord 1.00
- Bamburi Cement Ltd Ord 5.00
- 2.Crown Paints Kenya Ltd Ord 5.00
- 3. E.A.Cables Ltd Ord 0.50
- 4. E.A.Portland Cement Co. Ltd Ord 5.00

#### **ENERGY & PETROLEUM**

- 1. KenGen Co. Ltd Ord. 2.50
- 2. KenolKobil Ltd Ord 0.05
- 3. Kenya Power & Lighting Co Ltd Ord 2.50
- 4. Total Kenya Ltd Ord 5.00
- 5. Umeme Ltd Ord 0.50

#### **REAL ESTATE INVESTMENT TRUS**

1. STANLIB FAHARI I-REIT. Ord.20

Source: NSE handbook (2015) as at 17<sup>th</sup> May 2017.

# Appendix II: Data Collection Tool

		20	11			20	12			20	13			20	14			20	15	
Name of company	Dividend payout ratio	D/E Ratio	CPI	Asset tutn over ratio	Dividend payout ratio	D/E Ratio	CPI	Asset tutn over ratio	Dividend payout ratio	D/E Ratio	CPI	Asset tutn over ratio	Dividend payout ratio	D/E Ratio	CPI	Asset tutn over ratio	Dividend payout ratio	D/E Ratio	CPI	Asset tutn over ratio

## Appendix III: Data Collected

FIRM	YEAR	FIRM SIZE	CAPITAL STRUCTURE (D/E RATIO)	SHARE RETURN	DIVIDEND PAYOUT RATIO	СРІ
Kakuzi	2011	15.1551	0.2839	0.75	0.1141	13.98
Kakuzi	2012	15.0886	0.2229	0.75	0.1598	9.64
Kakuzi	2013	15.1286	0.2295	0.75	0.4556	5.72
Kakuzi	2014	15.1655	0.233	0.75	0.4588	6.88
Kakuzi	2015	15.3318	0.2155	1	0.1857	6.58
Kapchorua Tea Co.	2011	14.2667	0.3274	1.5	0.1569	13.98
Kapchorua Tea Co.	2012	14.4899	0.3285	1.5	0.3763	9.64
Kapchorua Tea Co.	2013	14.5471	0.3158	1.5	0.2329	5.72
Kapchorua Tea Co.	2014	14.4726	0.309	1	-0.8585	6.88
Kapchorua Tea Co.	2015	14.5002	0.309	1	-0.8585	6.58
Limuru tea	2011	12.1613	0.2408	0.375	0.2223	13.98
Limuru tea	2012	12.6761	0.2776	0.0625	0.0884	9.64
Limuru tea	2013	12.7455	0.2859	0.0625	0.3156	5.72
Limuru tea	2014	12.7326	0.2803	0.05	-3.6254	6.88
Limuru tea	2015	12.743	0.2349	0	0	6.58
Rea Vipingo	2011	14.3503	0.2842	0.16	0.7126	13.98
Rea Vipingo	2012	14.6435	0.2687	0.22	0.1413	9.64
Rea Vipingo	2013	14.6812	0.2302	0.22	0.1735	5.72
Rea Vipingo	2014	14.8442	0.2294	0	0	6.88
Rea Vipingo	2015	14.9796	0.2098	0	0	6.58
Sasini tea	2011	16.0628	0.322	0.8	0.2532	13.98
Sasini tea	2012	16.0041	0.3035	0.75	-0.4593	9.64
Sasini tea	2013	16.0188	0.3088	0.25	0	5.72
Sasini tea	2014	16.5189	0.1914	0.25	1.2552	6.88
Sasini tea	2015	16.5909	0.1533	1.25	0.0518	6.58
Williams tea	2011	15.6127	0.2596	2.5	-0.2674	13.98
Williams tea	2012	15.7956	1.259	1.5	0.0768	9.64
Williams tea	2013	15.8979	5.4709	1.5	0.0768	5.72
Williams tea	2014	15.9614	1.2487	1.4	0.0827	6.88
Williams tea	2015	15.9624	0.2514	8	-1.5387	6.58
Car and General	2011	15.5315	0.2882	0.11	0.0637	13.98
Car and General	2012	15.5569	0.3032	0.11	0.069	9.64
Car and General	2013	15.7472	0.2595	0.16	0.0847	5.72
Car and General	2014	15.9139	0.4119	0.16	0.0864	6.88
Car and General	2015	16.0114	0.0262	0.12	0	6.58
Marshall Ltd	2011	13.8896	0.0012	0	0	13.98

Marshall Ltd	2012	13.2483	0.0013	0	0	9.64
Marshall Ltd	2013	13.1521	0.0442	0	0	5.72
Marshall Ltd	2014	13.3112	0.0668	0	0	6.88
Marshall Ltd	2015	13.2198	0.0362	0	0	6.58
Sameer Africa	2011	14.955	0.0538	0.04	0.5742	13.98
Sameer Africa	2012	15.0392	0.0568	0.04	0.3732	9.64
Sameer Africa	2013	15.1153	0.0568	0.05	0.2081	5.72
Sameer Africa	2014	15.1655	0.0721	0.06	0	6.88
Sameer Africa	2015	14.044	0.0018	0	0	6.58
Express Kenya	2011	13.5532	0.8938	0	0	13.98
Express Kenya	2012	13.1135	0.685	0	0	9.64
Express Kenya	2013	13.0826	0.6086	0	0	5.72
Express Kenya	2014	13.0772	0.9496	0	0	6.88
Express Kenya	2015	12.9988	1.8748	0	0	6.58
Kenya Airways	2011	18.1817	1.4459	0.3	0.1959	13.98
Kenya Airways	2012	18.1649	1.3349	0.162	0.2252	9.64
Kenya Airways	2013	18.6252	1.3046	0	0	5.72
Kenya Airways	2014	18.8172	2.0106	0	0	6.88
Kenya Airways	2015	19.0199	-17.8709	0	0	6.58
National Media Group	2011	15.9921	0.0269	3.2	0.4068	13.98
National Media Group	2012	16.1836	0.0189	4	0.9793	9.64
National Media Group	2013	16.253	0.0103	4	0.5582	5.72
National Media Group	2014	16.2958	0.0066	1	0.5747	6.88
National Media Group	2015	16.3569	0.0171	4	0.6362	6.58
Std Group	2011	15.0718	0.4721	0	0	13.98
Std Group	2012	15.0687	0.3366	0	0	9.64
Std Group	2013	15.2354	0.3786	0.1	0	5.72
Std Group	2014	15.2269	0.3383	0.1	0	6.88
Std Group	2015	15.287	0.0971	0	0	6.58
TPS Serena	2011	16.3906	0.4364	1.3	0.3128	13.98
TPS Serena	2012	16.417	0.4008	1.3	0.3904	9.64
TPS Serena	2013	16.5966	0.3093	1.35	0.5453	5.72
TPS Serena	2014	16.5843	0.293	1.35	1.4835	6.88
TPS Serena	2015	16.5765	0.455	0.25	-0.3222	6.58
Athi River Mining	2011	16.8367	1.6659	0.4	0.1722	13.98
Athi River Mining	2012	17.1096	1.9005	0.1	0.1988	9.64
Athi River Mining	2013	17.1933	1.7522	0.12	0.2203	5.72
Athi River Mining	2014	17.1364	1.0619	0.12	0.199	6.88
Athi River Mining	2015	17.4904	0.8807	0	0	6.58
Bamburi	2011	17.3271	0.175	2	0.4956	13.98

Bamburi	2012	17.5776	0.1674	2.1	0.6319	9.64
Bamburi	2013	17.5771	0.1906	2.2	0.8895	5.72
Bamburi	2014	17.5289	0.191	2.4	0.558	6.88
Bamburi	2015	17.5539	0.1695	2.6	0.4326	6.58
Crown	2011	14.6109	0.0864	0.25	0.2299	13.98
Crown	2012	14.6301	0.0403	0.25	0.2221	9.64
Crown	2013	14.8958	0.011	0.35	0.1942	5.72
Crown	2014	15.2725	0.0026	0.35	0.1891	6.88
Crown	2015	15.4534	0.1009	0.12	0.1573	6.58
EA Cables	2011	15.4236	0.3488	1.6	0.0515	13.98
EA Cables	2012	15.6177	0.3703	2	0.0384	9.64
EA Cables	2013	15.7383	0.4131	2	0.0305	5.72
EA Cables	2014	15.881	0.6226	1	0.015	6.88
EA Cables	2015	15.9419	0.8454	0	0	6.58
EA Portland	2011	16.4967	0.8253	0.1	0.0802	13.98
EA Portland	2012	16.457	1.5161	0	0	9.64
EA Portland	2013	16.6138	0.8073	0.15	0.038	5.72
EA Portland	2014	16.5582	0.8204	0	0	6.88
EA Portland	2015	16.9475	0.431	0	0	6.58
Kengen	2011	18.8969	1.157	0.2	0.5284	13.98
Kengen	2012	18.9101	1.1142	0.24	0.4673	9.64
Kengen	2013	19.0555	1.3121	0.24	0.2525	5.72
Kengen	2014	19.3378	1.9333	0.16	0.3111	6.88
Kengen	2015	19.6518	-2.9417	0.26	0.1241	6.58
Kenolkobil	2011	17.6436	0.1313	20	0.1933	13.98
Kenolkobil	2012	17.3024	0.1393	0	0	9.64
Kenolkobil	2013	17.1521	0.1075	2	0.2636	5.72
Kenolkobil	2014	16.99	0.039	4	0.2069	6.88
Kenolkobil	2015	16.6707	0.0246	7	0.1484	6.58
KPLC	2011	18.602	1.2528	0.18	0.185	13.98
KPLC	2012	18.7143	0.8389	0.2	0.1268	9.64
KPLC	2013	19.0316	1.2983	0	0	5.72
KPLC	2014	19.2096	1.3497	0.2	0.0837	6.88
KPLC	2015	19.4341	1.8192	0.2	0.0788	6.58
Total	2011	17.3765	0.3285	0	0	13.98
Total	2012	17.3114	0.0602	0.04	-0.6229	9.64
Total	2013	17.504	0.0726	0.12	0.2878	5.72
Total	2014	17.298	0.0726	0.14	0.3094	6.88
Total	2015	17.3485	0.0707	0.154	0.3002	6.58
Centum	2011	16.3252	0	0	0	13.98

Centum	2012	16.2637	0	0	0	9.64
Centum	2013	16.7579	0	0	0	5.72
Centum	2014	17.2032	0.0134	0	0	6.88
Centum	2015	18.0969	0	0	0	6.58
Olympia	2011	13.8871	0.2053	0	0	13.98
Olympia	2012	14.4402	0.3552	0.02	0.6173	9.64
Olympia	2013	14.456	0.71	0	0	5.72
Olympia	2014	14.2462	0.1272	0.05	0.222	6.88
Olympia	2015	14.2417	0.1105	0	0	6.58
BAT	2011	16.4366	0.3116	3.05	0.9846	13.98
BAT	2012	16.5353	0.2854	3.25	0.8866	9.64
BAT	2013	16.6479	0.3478	3.7	0.8996	5.72
BAT	2014	16.7199	0.3622	3.9	0.8343	6.88
BAT	2015	16.743	0.3645	4.95	0.9244	6.58
BOC ltd	2011	14.4126	0	1.36	0.6223	13.98
BOC ltd	2012	14.5034	0.0203	1.01	0.3017	9.64
BOC ltd	2013	14.7837	0.0055	1.04	0.2505	5.72
BOC ltd	2014	14.6486	0.0075	1.04	0.4422	6.88
BOC ltd	2015	14.6575	0	1.04	0.3942	6.58
CARBACID	2011	14.3694	0.1546	1	0.3373	13.98
CARBACID	2012	16.7481	0.127	1.2	0.2619	9.64
CARBACID	2013	14.606	0.0995	1.2	0.2144	5.72
CARBACID	2014	14.745	0.1006	1	0.1558	6.88
CARBACID	2015	14.9036	0.0987	0.14	0.4529	6.58
EA BREWERIES	2011	17.7218	0.3434	4.375	0.5477	13.98
EA BREWERIES	2012	17.8077	3.6938	4.375	0.006	9.64
EA BREWERIES	2013	17.8711	3.4206	2.75	0.0109	5.72
EA BREWERIES	2014	17.9565	2.9166	2.75	0.0107	6.88
EA BREWERIES	2015	18.0193	1.819	3.75	0.6221	6.58
MUMIAS	2011	16.9587	0.3964	0.25	0.3957	13.98
MUMIAS	2012	17.1261	0.3895	0.25	0.3801	9.64
MUMIAS	2013	17.1217	0.4103	0	0	5.72
MUMIAS	2014	16.9752	0.2148	0	0	6.88
MUMIAS	2015	16.8312	0.1401	0	0	6.58
UNGA	2011	15.5575	0.1364	0.15	0.1287	13.98
UNGA	2012	15.6718	0.2111	0.15	0.1631	9.64
UNGA	2013	15.9084	0.2998	0.15	0.2144	5.72
UNGA	2014	15.8272	0.3473	0.15	0.1483	6.88
UNGA	2015	15.9756	0.2726	0.2	0.1762	6.58