

**CLIENTELE EFFECTS IN DIVIDENDS DISTRIBUTIONS FOR COMPANIES  
QUOTED AT THE NSE**

**BY**

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**DECLARATION**

I hereby declare that this research project is my original work, and has not been presented to any other university or institution of higher learning for academic purposes.

Signed.....

Date.....

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This project has been submitted for examination with my approval as the university supervisor.

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My greatest gratitude goes to the Almighty God for giving me the opportunity to do this and for good health.

## **DEDICATION**

To my wife Brendah for his love and patience and lastly to my son Mark for continuously being my source of strength.

## **ABSTRACT**

The objective of the study was to investigate the clientele effects in dividend distribution for companies quoted at the NSE. Quantitative methods were used to fulfill the main purpose of the study. A regression model was used to carry out the empirical analysis. The study used secondary data that was collected from the company's published annual reports, company's journals and records from NSE.

The findings and analysis reveal that capital needs and tax (individual) have an effect on the dividend distribution. The study used a multiple linear regression model to establish the association between capital needs and tax (individual) on dividend distribution. The results obtained from the regression model show that there is an inverse relationship between capital needs and tax (individual) on dividend distribution

In view of these findings, the researcher recommends future research in this area.

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Dividend policy remains a source of controversy despite years of theoretical and empirical research, including one aspect of dividend policy: the linkage between dividend policy and stock price risk (Allen and Rachim, 1996). Paying large dividends reduces risk and thus influence stock price (Gordon, 1963) and is a proxy for the future earnings (Baskin, 1989).

Dividend announcements convey policy information about the firms' position in regard to dividend payout. Announcement of change in dividend payout will move the stock prices and thereby affect the firm's value. Signaling Theory suggest that the management of a company knows more about the future earnings prospects of a company than the stockholders. According to this theory, declaration of dividends more than that anticipated by the market will be interpreted that the future financial prospects of the company will be good. Conversely, a reduction of dividends will signal that the management expects poor earnings and does not believe that the current earnings will be maintained. The market price of a firm will drop when dividend falls because investors will sell their stocks in anticipation of difficult times for the firm (Miller and Rock, 1985). Dividends are a distribution of a company's profits. The amount received as dividends depend on the number of shares one holds. Firms issue equity which takes the form of either common shares or preferred shares. Each preferred share is normally paid a fixed annual dividend. In contrast, dividends obtained from common shares may fluctuate with the firm's profits. Hence a company must determine the amount of profits to be distributed as dividends to its shareholders and this procedure is more commonly referred as the dividend policy of the firm. The distribution policy therefore defines the level of cash distributions to shareholders, the form of distribution (dividend or stock repurchase) and the stability of the distribution. A dividend distribution therefore occurs when a company offers some sort of reward to its shareholders in excess of the value of the company's shares. Companies do this both to reward the loyalty of current shareholders and to attract new investors. It is important to note that

companies are in no way obligated to pay dividends, and they may reduce or completely cut them out in times of financial turmoil.

### **1.1.1 Clientele Effects**

Different groups of investors, or clienteles, prefer different dividend policies. A firm's past dividend policy determines its current clientele of investors. Clientele effects impede changing dividend policy. A clientele effect therefore refers to stock price movement resulting from investor reactions to changes in a company's policies. For example, if a company adopted a high-paying dividend payout ratio, then investors preferring to receive higher dividends will purchase more of the company's shares, thereby increasing the company's stock price. The clientele effect assumes investors are partial to a company's policies and that changes will result in the purchase or sale of the underlying company's stock based upon the investor's preferences (Farrar and Selwyn, 1967). Dividend clientele usually make decisions regarding distributions based on which is most advantageous to them. Clientele groups are often dictated by age as well as income level. Older or retired investors tend to prefer higher dividend income than younger shareholders, who may prefer that the company use free cash flows to fund growth rather than distribute dividends. Ultimately, dividend clienteles tend to be growth-versus-income parties.

Clientele groups comprise institutional investors and retail (individual) investors. Institutional investors are organizations that trade securities in large quantities. Examples of institutional investors are pension funds and life insurance companies. Retail investors on the other hand are individual investors who buy and sell securities for their personal account, and not for another company or organization. Retail investors are further categorized as local and foreign individual investors. Accordingly the shareholders of the firms trading stocks at the NSE are either institutional or individual investor clienteles. A dividend clientele is a group of shareholders with a preference regarding how much a company will pay out in dividends, often for tax reasons.

The analysis of the clientele effect of the dividend is associated to a market imperfection, the existence of taxes, and is related to the discussion on the relevance of dividend distributions. Because there are economic agents with different fiscal framings, this can mean that some will prefer dividends, while others will prefer capital gains (Miller and Rock, 1985). Miller and Modigliani (1961) admit the possibility of clientele effects linked to dividends distributions, but

they assert that if the distribution of the firms' payout ratios corresponds exactly to the distribution of the investors' preferences, then the situation is not different from the case of perfect markets, where it is irrelevant for investors to receive dividends or capital gains. Each firm will tend to attract its own clientele, constituted by the investors that prefer its payout ratio.

But the main point is that the existence of systematic fiscal disadvantage of dividends in relation to the capital gains can, in fact, lead to a concentration of preferences in a certain type of stocks. Rationally, the unfavorable fiscal treatment of dividends in relation to capital gains should lead investors with higher incomes to prefer capital gains. This is because taxes and brokerage costs hurt investors who have to switch companies due to change in payout policy as they have huge investment. Many authors/researchers suggest that a substantial part of the stocks are held by investors that are not subjected to a higher taxation on dividends than on capital gains (like charity institutions, foundations, retired people with low income), or by investors that pay lower taxes on dividends (like insurance companies), generating a clientele effect favorable to dividends. Farrar and Selwyn (1967) observed that the different fiscal treatment of dividends and capital gains together with the structure of the income tax existing at the time of their study implied that investors with different tax brackets would face different marginal taxes on dividends.

### **1.1.2 Nairobi Stock Exchange**

A stock market is a place where securities are traded. These securities are issued by listed companies and by the government, with the aim of raising funds for different purposes such as to fund expansion for the former, and development and finance budget deficits for the latter. Common securities traded on a stock exchange include company shares, corporate bonds, and government debt in the form of treasury bonds. The Nairobi stock exchange which was formed in 1954 as a voluntary organization of stock brokers is now one of the most active capital markets in Africa. Subsequent development of the market has seen an increase in the number of stockbrokers, introduction of investment banks, establishment of custodial institutions and credit rating agencies and the number of listed companies have increased over time. As a capital market institution, the Stock Exchange plays an important role in the process of economic development. It helps mobilize domestic savings thereby bringing about the reallocation of financial resources from dormant to active agents. Long-term investments are made liquid, as the transfer of

securities between shareholders is facilitated. The Exchange has also enabled companies to engage local participation in their equity, thereby giving Kenyans a chance to own shares.

Companies can also raise extra finance essential for expansion and development. To raise funds, a new issuer publishes a prospectus which gives all pertinent particulars about the operations and future prospects and states the price of the issue. A stock market also enhances the inflow of international capital. They can also be useful tools for privatization programs. The Nairobi stock exchange deals in both variable income securities and fixed income securities. Variable income securities are the ordinary shares which have no fixed rate of dividend payable as the dividend is dependent upon both the profitability of the company and what the board of directors decides. The fixed income securities include Treasury and Corporate Bonds, preference shares, debenture stocks - these have a fixed rate of interest/dividend, which is not dependent on profitability. Most of the businesses in the exchange are in the financial or industrial sectors, though agriculture and other commercial services are also represented.

## **1.2 Statement of the Problem**

Miller and Modigliani (1961) admit the possibility of clientele effects linked to dividends distributions, but they state that if the distribution of the firms' payout ratios corresponds exactly to the distribution of the investors' preferences, then the situation is not different from the case of perfect markets, where it is irrelevant for investors to receive dividends or capital gains. Each firm will tend to attract its own clientele, constituted by the investors that prefer its payout ratio. That even if there is shortage of offer of a specific payout ratio in the market, the investors nevertheless can build their desired portfolios without having to pay a premium for those stocks, by acquiring a combination of stocks with different payout ratios, each one with the appropriate weight. In fact, given the existence in the market of a great diversity of payout ratios, this process will only fail to eliminate permanent premiums or discounts in stocks if the distribution of the investors' preferences is strongly concentrated in any of the extremities of the scale of payout ratios. Asquith and Mullin (1983); Born et al., (1983) and Miller and Rock (1985) state that market imperfection is only relevant if it results in investors having systematic preferences for dividends or for capital gains.

Locally, dividend related studies conducted at the NSE include: Karanja (1987) studied dividend practices of publicly quoted companies; Njoroge (2001) examined relationship between dividend

payout and some financial ratios; Onyangoh (2004) investigated the responses of stock prices to earnings announcements; Kiio (2006) investigated market efficiency and effects of cash dividend announcements on share prices; Ngunjiri (2010) studied the relationship between dividend payment policies and stock price volatility and finally Mbuki (2010) studied factors that determine dividend payout ratio among SACCOs in Kenya. The studies' findings suggest that firms pay dividend because of lack of investment opportunities, availability of cash to pay dividends and the sustainability of the dividend in future. In essence dividend payout ratio for firms listed at the NSE is influenced by the aforementioned three factors. Studies further suggest that earnings announcements contain relevant information to investors which impacts positively on stock prices after the dividend announcements. A clientele effect however refers to stock price movement resulting from investor reactions to changes in a company's policies. For example, if a company adopted a high-paying dividend payout ratio, then investors preferring to receive higher dividends will purchase more of the company's shares, thereby increasing the company's stock price. The clientele effect assumes investors are partial to a company's policies and that changes will result in the purchase or sale of the underlying company's stock based upon the investor's preferences. The above empirical findings on market reactions to information on dividend distribution therefore suggest the existence of clientele effects at the NSE. Clientele effect in dividend is not only associated with market imperfection like taxes but is related to dividend distributions. Therefore to the best of the researcher's knowledge there is no existing study local that has been done on the clientele effect in dividends distribution. The purpose of this study is to answer the research question "What are the clientele effects in dividend distribution for companies quoted at the Nairobi stock exchange?"

### **1.3 Objective of the Study**

To investigate the clientele effects in dividend distribution for companies quoted at the NSE.

### **1.4 Significance of the Study**

The findings of this study would be of interest to the management of publicly quoted companies who will be able to understand the clientele effects in dividend distribution. The government of Kenya would be enlightened in a bid to make policies relating to dividends distribution. Through knowledge of clientele effect in dividend distribution will assist in ascertaining the appropriate

amount of dividends paid out. These findings would enable financial consultants to offer proper services to their clients. Finally this study may be of significance to scholars and academicians who may wish to use the findings of this study as a basis for further research on this subject as well as related studies on the investors.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter summarizes the information from other researchers who have carried out their research in the same field of study. The specific areas covered are theoretical framework, and empirical review.

#### **2.2 Theoretical Framework**

##### **2.2.1 Clientele Effect Theory**

The clientele effect is a theory which describes the intention of investors to invest in firms which suits their factor endowments; among the most common ones is their tax circumstance. It can be said that there is an inverse relationship between stock returns (dividends) and tax levels. For instance, an investor in a high tax bracket would prefer to invest in stock giving a low rate of return so as to pay less tax. On the other hand, an investor in a low tax bracket would definitely invest in stocks with higher returns as he currently does not have a large tax liability. Pettit (1977) showed that older investors (retired persons) were more likely to hold high dividend shares because they pay lower income tax. In this case we call it the tax clientele effect. Hence the clientele effect refers to firms making their dividend policy decision based the customers they would like to attach to themselves (Litzenberger and Ramasawmy, 1979). The clientele effect further supports the proposition that the dividend policy does not affect the value of the stock because investors obtain income from the shares in their preferred way.

Clientele effects could arise from non-tax considerations including informational advantages, distinct investment styles, or monitoring ability. Institutions may be better informed and this informational advantage could be manifested in differing attitudes towards payout policy. Amihud and Li's (2006) study of the relation between price reactions to dividend announcements and institutional holding provides evidence that institutions are more informed. Del Guercio (1996) examines the role of dividends in the portfolio selection of banks and mutual funds, and finds that dividend yield has no power in explaining the portfolio choice of these institutions. Her evidence suggests that the prudent-man rule has an important role, but that dividends do not play

a major role in the institutional investor portfolio decision. On the other hand, Dhaliwal, Erickson, and Trezevant (1999) provide empirical evidence that after dividend initiation, firms' institutional investor clientele changes based on their tax preferences, with a surge in ownership by tax-exempt/tax-deferred and corporate investors. Hotchkiss and Lawrence (2007) report that institutions have distinct investment styles based on dividend yields.

### **2.2.2 Dividend Irrelevance Theory**

This was founded by Miller and Modigliani (1961) when they published a theoretical paper showing the irrelevance of dividend policy in a world without taxes, transaction costs or market imperfections. The theory suggests that, in a perfect world, dividends are irrelevant when the value of the stock and, therefore, of the firm is determined. The theory implies that retained earnings belong to the shareholders of the company and shareholders are not concerned whether money is used to pay out dividends or for investment purposes because they benefit either way by receiving dividends or via share price appreciation. If investors will require cash, they can always sell a few of the shares which increased in value due to investments. Miller and Modigliani also suggest that the clientele effect exists. This refers to the tendency for investors to hold stocks which are in line with their dividend payment preferences. Investors who prefer regular dividends hold stocks of the companies which provide such dividends and investors who prefer for funds to be reinvested and to be reflected in the share appreciation hold those stocks that are aligned with such preferences.

The payout decision is irrelevant because it neither creates nor destroys value for shareholders. If the investment decision is held constant, higher dividends result in lower capital gains, leaving the total wealth of shareholders unchanged. They stated that because investors do not need dividends, to convert their shares into cash they will not pay higher prices for firms with high dividend payout. In other words payout policy will have no impact on the value of the firm. However in real world situations there are market imperfections such as taxation effects, transaction costs, asymmetric information and agency cost which affect shareholders value. Lintner, 1956 and Brav et al., 2005 have shown that a firm's dividend policy might impact on the value of the firm.



### **2.2.3 The Agency Theory**

It holds that payment of dividend reduces free cash flow available for management to pursue their personal opportunistic consumption and suboptimal investments. Payment of dividend forces management to go to the capital market in order to raise needed capital for investment hence ensuring that only viable projects are undertaken. The company should pay the shareholders profits that rightly belongs to them and let them make their own investment decisions (Pandey, 2008).

According to La Porta et al. (2000), the agency approach does not rely on the assumptions of Miller and Modigliani (1961) when explaining dividend policies. First, the investment policy of firms cannot be viewed as independent from the firm's dividend policy. Payouts can reduce cash flow available to invest in poor NPV projects. Second, the allocation of profits to all shareholders on a pro rata basis cannot be taken for granted. It does not allow for the possible diversion of resources by insiders at the expense of minority shareholders. Therefore, dividend payments can be seen as a mechanism to reduce agency costs. In fact, dividend payments help to alleviate agency conflicts between managers and shareholders because paying dividends and subsequently raising funds in the capital markets serve as a disciplinary mechanism Rozeff, (1982) and Easterbrook, (1984). A study by Jensen (1986) argues that higher dividend payments reduce "agency costs of free cash flow" by preventing managers from using excess cash to undertake low return projects or "pet" projects which benefit managers rather than shareholders.

Saxena, (1999), in his paper of agency theory suggests that widely spread ownership has more bargaining power which has also ensured more protection of outsiders. Therefore management pays more dividends to control the influence of widespread ownership. The agency problem however becomes more severe as the number of common stock holders increase as a result of increasing the need for monitoring actions. They concluded by hypothesizing a positive relationship between the number of common stock holders and dividend payout ratio.

### **2.2.4 The Signaling Theory**

The signaling theory of dividends states that managers use dividend policy to send signals about the firm's future earnings (Bhattacharya, 1979; Miller and Rock, 1985; John and Williams, (1985). This theory is based on the assumption that information is not equally available to all

parties at the same time, leading to information asymmetry rule. This states that the markets will be more efficient if sellers provided more information to the buyers. This theory is applied in the financial markets for instance a company increasing its dividends is signaling that its prospects are better.

Signal theory is based on the premise that the management of a company knows more about the future earnings prospects of a company than do the stockholders. According to the theory if a company declares dividends more than that anticipated by the market, this will be interpreted that the future financial prospects of the company will be good. Conversely, if a company cuts its dividends the markets take this as a signal that the management expects poor earnings and does not believe that the current earnings will be maintained. The market price of a firm will drop when dividend falls because investors will sell their stocks in anticipation of difficult times for the firm (Miller and Rock, 1985).

Linter, 1956 argues that if a firm's manager believes in signaling theory he would be wary of the signal their dividend signal may send to the investors. Even if the firm has some interesting investment opportunities that could be financed with retained earnings, management would seek alternative financing to avoid cutting dividends that may send an unfavorable signal to the market. Thus making Signaling theory useful in reducing Information asymmetries among directors and members

### **2.3 Empirical Studies**

Following the work of Miller and Modigliani, the clientele effects were also suggested by Elton and Gruber (1970). These authors tried to detect the existence of an empirical relationship between the dividend policy of the firm and the tax supported by the marginal investor. The evidence of this relationship is essential for the demonstration of a clientele effect, because a change in the dividend policy should lead to a change of the stockholders structure. A specific dividend policy will attract investors with specific income tax brackets.

The authors, extending the reasoning of Campbell and Beranek (1955), began by establishing a relationship between the stock price behavior on the distribution day and the tax of the marginal stockholder. A stockholder that sells its stocks before the distribution of dividends loses the right to receive them. If he sells the stocks after the distribution, it receives the dividend, but he should

expect to receive a lower price. In a market with rational arbitrage, the price reduction should reflect the relative value of dividends and capital gains for the marginal stockholder. As the taxes on dividends and on capital gains are different, the different fiscality on these two types of returns affects the decision. In a symmetric perspective, we can infer the marginal investor's tax, just by observing the reduction of the price following the dividend distribution.

Gwilym *et al.* (2006) extended the work of Lintner, (1956) to include eleven international markets, the majority of which were European. Gwilym *et al.* (2006) found that higher payout ratios do not lead to higher, real dividend growth. Dividend policy and a payout ratio, hence, could make significant impact on the corporate future value when well established and carefully followed. Corporate governance institutes an effective mechanism of how much to pay as share dividends and when to pay, taking into account a variety of factors relating to the company's current status, its future as well as market and economic circumstances.

Given the fact that, for most investors, the dividend tax is higher than the capital gains tax, this implies that firms should not pay dividends, because under these circumstances, the investors will prefer the higher after tax returns associated with capital gains. Brennan (1970) developed the work of Farrar and Selwyn in a context of general equilibrium, assuming that investors maximize the expected social welfare. The author developed a basic condition for the equilibrium of the stock market in a uncertainty context, when the investors face different taxes. The framework is the Capital Asset Pricing Model, extended to include the effects of taxes that investors pay on dividends and on capital gains.

This author's conclusion is not far from those stated by Farrar and Selwyn. In relation to dividend payout, Brennan states that, for a given risk level, the investors demand higher returns on stocks with higher expected dividend yields, due to the higher taxation of dividends relative to capital gains. In other words, the investors accept lower returns before taxes, in the stocks that pay lower dividends and provide higher capital gains. Black and Scholes (1974) also recognize the possibility of the existence of a clientele effect. They state that the firms, knowing that there are investors for several types of dividend yields, would adjust their dividend policies as necessary, to satisfy the demand. The authors argue that some types of investors can prefer high dividend yields, while other types of investors, can prefer low dividend yields. The first group includes: firms in general, because they support higher taxes on capital gains than on dividends;

funds where the beneficiaries receive returns resulting only from dividends and interest; investors that are spending their wealth and find receiving dividends easier than selling stocks or borrowing. The second group includes all investors that pay higher taxes on dividends than on capital gains. Finally, we have a group of investors that are tax exempt, which should be indifferent to the dividend yield of the stocks they hold.

Miller and Scholes (1978) demonstrated that even if the income tax of individuals is higher than the tax on capital gains, there are instruments in the financial market that allow individuals to design investment and financing strategies to neutralize the fiscal disadvantage of the dividends. The implication of their demonstration is that the investors should be indifferent to dividends or capital gains, and so, there would not be reason to detect any clientele effect associated to the differential fiscal. On the other hand, the authors verified that the stockholder segmentation that would result from a clientele effect, didn't have any clear translation to the reality of the stockholder structure of the firms.

A number of studies on the information content of dividend announcement and related areas have been carried out on the NSE. However, no single study came to the attention of this researcher on the clientele effect in dividend distribution. Karanja (1987) asserts that the dividend policy does not only involve the decisions whether or not to pay dividends but also how much to pay, and the mode of payment. He also points out that the firm's cash flows and cash position do influence the changes in dividend policy. Njoroge (2001) examined relationship between dividend payout and some financial ratios such as return on assets. The results obtained were that the most significant variable in making dividend decisions is return on assets while return on equity and growth in assets are not considered in making dividend decisions.

A study by Kiiro (2006) sought to investigate market efficiency and effects of cash dividend announcements on shares of companies listed on the NSE. On the latter, she observes that cash dividend announcements caused increased volatility in the stock market through an event window of five years, as shown by the significance in variation of adjusted market returns after the dividend announcement. In another study, Onyangoh (2004) sought to investigate the responses of stock prices to earnings announcements as evidenced in the NSE. He sampled 16 out of a population of 48 listed companies at the NSE, covering the period 1998-2003. By use of cumulative average residuals, weekly share price indices are computed over the 17 week window

period. Regression statistics were generated including graphical presentation to capture the stock price adjustments to successive annual earnings announcements. The results of the study showed that the earning announcements contain relevant information to investors which are fully impounded in stock prices prior to or almost instantaneously at the time of announcement. He observed that the 2003 was an outlier which evidenced existence of momentum stock returns. Ngunjiri (2010) studied the relationship between dividend payment policies and stock price volatility. His findings indicated that payment policies had a great impact on the stock price volatility. Mbuki (2010) studied factors that determine dividend payout ratio among SACCOs in Kenya. He found out that the dividend payout ratio was determined by different factors including availability of investment opportunities, availability of cash to pay the dividend and the sustainability of the dividend in future.

Although there is no existing study local that has been done on the clientele effect on dividends distribution, studies carried in the developed world provide empirical evidence consistent with the existent of clientele effects related to the differences in taxation of dividends and capital gains. There is need to establish the relevant of this to the NSE given that Kenya has different tax rate on dividends (5%) and capital gains (0%); having been suspended in 1985. Given that the dividend tax is higher than the capital gains tax; will the NSE investors prefer the higher after tax returns associated with capital gains or the high dividend yields/payout? Are firms listed at the NSE influenced by clientele effects in making dividend distribution decision?

## **2.4 Clientele Effects on Dividend Distribution**

### **2.4.1 Dividend Policies on Share Prices**

A number of theoretical mechanisms have been suggested that cause dividend yield and payout ratios to vary inversely with common stock volatility. These are duration effect, rate of return effect, arbitrage pricing effect and information effect. Duration effect implies that high dividend yield provides more near term cash flow. If dividend policy is stable high dividend stocks will have a shorter duration. Gordon Growth Model can be used to predict that high-dividend will be less sensitive to fluctuations in discount rates and thus ought to display lower price volatility.

Agency cost argument, as developed by Jensen (1988) proposed that dividend payments reduce costs and increase cash flow, that is payment of dividends motivates managers to disgorge cash

rather than investing at below the cost of capital or wasting it on organizational inefficiencies. Some authors have stressed the importance of information content of dividend (Asquith and Mullin, 1983; Born et al., 1983). Miller and Rock (1985) suggested that dividend announcements provide the missing pieces of information about the firm and allows the market to estimate the firm's current earnings. Investors may have greater confidence that reported earnings reflect economic profits when announcements are accompanied by ample dividends. If investors are more certain in their opinions, they may react less to questionable sources of information and their expectation of value may be insulated from irrational influence.

Rate of return effect, as discussed by Gordon (1963), is that a firm with low payout and low dividend yield may tend to be valued more in terms of future investment opportunities (Donaldson, 1961). Consequently, its stock price may be more sensitive to changing estimates of rates of return over distant time periods. Expanding firms may have lower payout ratio and dividend yield, exhibiting price stability. This may be because dividend yields and payout ratio serves as proxies for the amount of projected growth opportunities. If forecasts of profits from growth opportunities are less reliable than forecasts of returns on assets in place, firms with low payout and low dividend yield may have greater price volatility.

According to duration effect and arbitrage effect, the dividend yield and not the payout ratio is the relevant measure. The rate of return effect implies that both dividend yield and payout ratio matters. Dividend policy may serve as a proxy for growth and investment opportunities. Both the duration effect and the rate of return effect assume differentials in the timing of the underlying cash flow of the business. If the relationship between risk and dividend policy remains after controlling for growth, this would suggest evidence of either the arbitrage or information effect.

Empirical studies have examined cross-sectional variation in dividend payout ratios and Capital Asset Pricing Model (CAPM) beta coefficients. Gordon (1963) estimated CAPM betas for 307 US firms and obtained significant correlation between beta and dividend payout. Rozeff (1982) found a high correlation between value line CAPM and betas and dividend payout for 1000 US firms. Fama (1991) and Fama and French (1992) focus on dividends and other cash flow variables such as accounting earnings, investment, industrial production etc to explain stock returns. Baskin (1989) takes a slightly different approach and examines the influence of dividend policy on stock price volatility, as opposed to returns. The difficulty in any empirical work

examining the linkage between dividend policy and stock volatility or returns lies in the setting up of adequate controls for the other factors. For example, the accounting system generates information on several relationships that are considered by many to be measures of risk. Baskin (1989) suggests the use of the following control variables in testing the significance of the relationship between dividend yield and price volatility: operating earnings, size of the firm, level of debt financing, payout ratio and level of growth. These variables have a clear impact on stock returns but also impact on dividend yield.

#### **2.4.2 Dividend policy on Dividend payout**

Dividend policy and dividend payout ratios have occasioned a large volume of research and are still attracting researchers. Beginning with Elton and Gruber (1970), a lot of research has been done on market reactions to dividends to establish the role of dividend tax clienteles.

Grinstein and Michaely (2005) provide a comprehensive investigation of the relation between the concentration of institutional versus individual ownership and payout policy. They consider a variety of factors that could affect payout policy, including institutional monitoring, free-cash flow problems, taxation, regulatory changes, and adverse selection, in order to establish whether payout policy affects the willingness of institutions to invest in stocks, and whether a concentration of institutional holders, in turn, affects future payout policy. Although they found some evidence on the role of a variety of other factors, they do not find meaningful tax-based preferences between institutional investors and individual investors, that is, unlike some of the prior conjectures in the literature, there is no systematic evidence that individuals are averse to dividends because they are taxed more heavily. These evidences are consistent with the survey results in Brav, Graham, Harvey, and Michaely (2005): that institutional investors as a whole do not show a clear preference for dividend over repurchase. Relatedly, Jain (1999) reports that institutions prefer to invest in low-dividend-yield stocks, whereas individual investors prefer higher dividend-yield stocks, inconsistent with a tax-based dividend clientele hypothesis that assumes institutions to be tax-advantaged.

The great majority of the studies on this subject, however, were based on developed markets, especially those of the USA and Europe and little concern was given to less developed nations. Some studies, for example Lintner (1956), Baker *et al.* (1985), Benartzi *et al.* (1997), Baker and Powell (2000), investigated the possible effect of past dividends on future earnings and/or dividends. Some other researchers focused on the effect of investment decisions of firms (Fama, 1974), industry classification (Baker, 1988), capital adequacy (Dickens *et al.*, 2002), and the ownership structure of companies (Mancinelli and Ozkan, 2006) on dividend policy. Baker *et al.* (2001) based their research on a survey of NASDAQ-listed firms to test twenty-two different factors that might influence the dividend policy. The analysis of the survey questionnaires showed that the most important determinants of dividend strategies are: Pattern of past dividends; Stability of earnings; Current and expected future earnings.

Fama and French (2001) were more concerned with disappearing dividends and the disappearance's real cause (be it the change of a firm's characteristics or a lower propensity to pay). They reported that the percentage of USA publicly held companies paying dividends declined from 66.5 per cent in 1978 to 20.8 per cent in 1999, and that this decline was partially caused by the changing characteristics of firms and was partially due to just less desire. The findings of DeAngelo *et al.* (2004) contradicted those of Fama and French since their results, which were based on aggregate dividends from 1978, showed an increase in dividends in recent years. It should be noticed that using aggregate data can sometimes be misleading when examining the corporate dividend trend because very large companies are more likely to dominate the aggregate results.

Arnott and Asness (2003) have challenged the familiar wisdom. Such wisdom advocates that a higher payout ratio results in low future growth. Arnott and Asness based their study on America stock market (S&P 500) and found that higher aggregate-dividend-payout ratios were associated with higher future earning growth. Both Zhou and Ruland (2006) and Gwilym *et al.* (2006) supported the findings of Arnott and Asness. Zhou and Ruland examined the possible impact of dividend payouts on future earning growth. Their study used a sample of active and inactive stocks listed on NYSE and NASDAQ with positive, non zero, payout ratio companies covering the period from 1950 to 2003. The findings showed that the payout ratio mean was 0.40 while



the median was 0.33. Also their reported regression results showed a strong positive relation between the payout ratio and the future earnings growth.

Rate of return effect, as discussed by Gordon (1963), is that a firm with low payout and low dividend yield may tend to be valued more in terms of future investment opportunities (Donaldson, 1961). Consequently, its stock price may be more sensitive to changing estimates of rates of return over distant time periods. Thus expanding firms although may have lower payout ratio and dividend yield, exhibit price stability. This may be because dividend yields and payout ratio serves as proxies for the amount of projected growth opportunities. If forecasts of profits from growth opportunities are less reliable than forecasts of returns on assets in place, firms with low payout and low dividend yield may have greater price volatility. According to duration effect and arbitrage effect, the dividend yield and not the payout ratio is the relevant measure. The rate of return effect implies that both dividend yield and payout ratio matters. Dividend policy may serve as a proxy for growth and investment opportunities. Both the duration effect and the rate of return effect assume differentials in the timing of the underlying cash flow of the business. If the relationship between risk and dividend policy remains after controlling for growth, this would suggest evidence of either the arbitrage or information effect

### **2.4.3 Dividend and Share Prices**

It is clear enough that in a perfect capital market in which external financing is freely available, rational investors would be indifferent between components of their returns: dividends and capital gains. However, it is equally clear that in an imperfect market the firm should consider the possible effects of the differential tax brackets of its shareholders, dilution of control, flotation and transaction costs, the stability of earning etc, when reaching its dividend decision. Under these circumstances, it is not clear if dividends would be preferred to capital gains or vice versa (Levy and Sarnat, 1990).

A regularly paid dividend well covered over the long run by the earnings of a company, will tend to boost the value of the common stock in the market compared with the common stock of a similar company with similar earnings that pays only occasional dividends or on which no dividends are declared. Even though earnings are the prime economic force behind the value of a share of equity, the actual distribution equity and such earnings has been looked upon by many analysts as an almost separate contribution to value. Other analysts and scholars have argued

that increased dividends are interpreted by the market as an announcement of a permanent or expected increase in earnings. The apparent collective market judgment about the desirability of dividends does not take into account the opportunities for profitable reinvestment of such funds within the company, in the so-called “growth companies” (Helfert, 1966).

## **2.5 Summary**

There is no existing study local that has been done on the clientele effect on dividends distribution. Studies carried in the developed world provide empirical evidence consistent with the existent of clientele effects related to the differences in taxation of dividends and capital gains. There is need to establish whether this has relevance to the NSE since Kenya has different tax rate on dividends (5%) and capital gains (0%); having been suspended in 1985. Given that the dividend tax is higher than the capital gains tax; will the NSE investors prefer the higher after tax returns associated with capital gains or the high dividend payout? Are firms listed at the NSE influenced by clientele effects in making dividend distribution decision?

## **CHAPTER THREE:**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the methods used in the collection of data pertinent in answering the research question. It was divided into research design, population and sampling design, data collection methods and data analysis methods.

#### **3.2 Research Design**

This study used a descriptive research design to investigate the clientele effects in dividend distribution for companies quoted at the NSE. According to Mugenda and Mugenda (1999), descriptive design provided a description of variables from members of the population. Descriptive research is a process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subject and report the findings (Kombo and Tromp, 2006).

According to Grodhe (2003), descriptive study is a method of collecting information by interviewing or administering questionnaires to a sample of individuals. This type of research design attempts to describe such things as possible behavior, attitudes, values and characteristics and at the same time to solicit the desired information by identifying individuals who are to be surveyed, the means by which the study are to be conducted and how data are to be summarized to provide the designed descriptive information. It also provided the researcher with an in-depth insight or understanding of the area of study. The researcher opted to use this kind of research considering the desire to acquire first hand data so as to formulate rational and sound conclusions and recommendations for the study. This research method is advantageous due to its flexibility; ease of use either qualitative or quantitative data or both and possibility of a greater options in selecting the instrument for data-gathering.

#### **3.3 Population and Sampling Design**

The population of interest in this study consisted of all the 50 firms listed at the Nairobi stock exchange (N.S.E) (see **appendix I**). This study, however, was limited to quoted companies

whose shares are freely transferable to the public, that is, from one individual to another in the Nairobi stock exchange and specifically those that pay dividends regularly. These companies are quoted since they have floated some of their share capital to the public (had gone “public”) and their share capital can be sold (are “quoted”) in the Nairobi stock exchange.

### **3.4 Data Collection**

In this study, emphasis was given to secondary data, collected from Nairobi Stock Exchange. The Nairobi Stock Exchange keeps copies of financial statements of all quoted companies from the time they were quoted. Dividend distributions were obtained from the daily pricelist schedules circulated by the Nairobi stock exchange hand books. Final dividend payment of each company was used for the purpose of this study. The period that was covered by the financial statements was 5 years; beginning 2006 to 2010.

### **3.5 Data Analysis**

Quantitative analysis was used in the study. Secondary data were collected from the records of companies listed at NSE. Empirical studies have agreed that there exists a linear relationship between Tax (individual), Capital needs and Dividend distribution. In order to examine the relationship that exists between Tax (individual), Capital needs and Dividend distribution, previous studies have used several analytical approaches. These include Gordon (1963) estimated CAPM betas for 307 US firms and obtained significant correlation between beta and dividend payout. Rozeff (1982) found a high correlation between value line CAPM and betas and dividend payout for 1000 US firms. Muriithi (2001) used regression analysis to carry out a study to establish whether interim dividends could be used in predicting final earnings in the NSE; hence this study used regression and correlation analysis to come up with the model expressing the relationship between the dividend distribution and tax (individual) and capital needs. A multiple regression model was developed to describe the relationship between the dependent and independent variables since there were two independent variables (tax (individual) and capital needs). The regression equation assumed the following form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where Y= Dividend distribution

$X_1 = \text{Tax (individual)}$

$X_2 = \text{Capital needs}$

$e = \text{error term}$

Dividend distributions were obtained from published accounts of the companies used in the study. Capital needs of individual firm as well as tax (individual) were also obtained from the firms published accounts. These information were obtained from the records at NSE. Correlation analysis was also used to check on the overall strength of the established regression model and also the individual significance of the predictor variables.

## CHAPTER FOUR:

### 4.0 DATA ANALYSIS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the analysis and findings with regard to the objectives and discussion of the same. The data was collected from a target population of 50 companies listed at NSE. The findings are presented in graphs and tables.

#### 4.2 Regression and Correlation Analysis

##### 4.2.1 Correlation Analysis

Two predictor variables are said to be correlated if their coefficient of correlations is greater than 0.5, (existence of multicollinearity). In such a situation one of the predictor variables must be dropped or removed from the model. As shown in table 4.2.1, the correlation between tax (individual) and capital needs equals  $0.24 < 0.5$  hence both of them were included in the model (no problem of multicollinearity). The matrix also indicated high correlation between the response and predictor variables, that is, capital needs had the highest correlation with Dividend distribution followed by tax (individual) respectively.

**Table 4.2.1: Correlations between Dividend distribution and capital need, tax (individual)**

		Dividend distribution	Capital needs	Tax (individual)
Pearson Correlation	Dividend distribution	1.000	.900	.750
	Capital needs	.900	1.000	.240
	Tax (individual)	.750	.240	1.000

Analysis in table 4.2.2 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables)  $R^2$  equals 0.796 that is, capital needs and tax (individual) explain 79.6 percent of the dividends distribution

leaving only 20.4 percent unexplained. The P- value of  $0.000 < 0.05$ , implies that the model of dividend distribution is significant at the 5 percent level of significance

**Table 4.2.2: Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.892 <sup>a</sup>	.796	.784	1.05783	.796	14.996	2	45	.000

**Source: Author Computation**

**Table 4.2.3: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.561	2	16.781	14.996	.000 <sup>a</sup>
	Residual	50.355	45	1.119		
	Total	83.917	47			

**Source: Author Computation**

The probability value (p-value) of a statistical hypothesis test is the probability of getting a value of the test statistic as extreme as or more extreme than that observed by chance alone, if the null hypothesis  $H_0$  is true. The p-value is compared with the actual significance level of the test and, if it is smaller, the result is significant. The smaller it is, the more convincing is the rejection of the null hypothesis. ANOVA findings in table 4.2.3 shows that there is correlation between the predictor variables (capital needs and tax) and response variable (dividend distribution) since P-value of  $0.000 < 0.05$

### 4.2.3: Regression Analysis

The established multiple linear regression equation becomes:

$$\text{Dividend distribution} = 0.928 - 0.746 \text{ capital needs} + 0.508 \text{ tax (individual)}$$

**Where**

$\alpha_0$  = 0.928, shows that if capital need and tax (individual) were all rated as zero, then dividend distribution would be 0.928

$\alpha_1$  = -0.746, shows that one unit change in capital needs results in 0.746 units decrease in dividend distribution

$\alpha_2$  = 0.508, shows that one unit change in tax (individual) results in 0.508 units decrease in dividend distribution

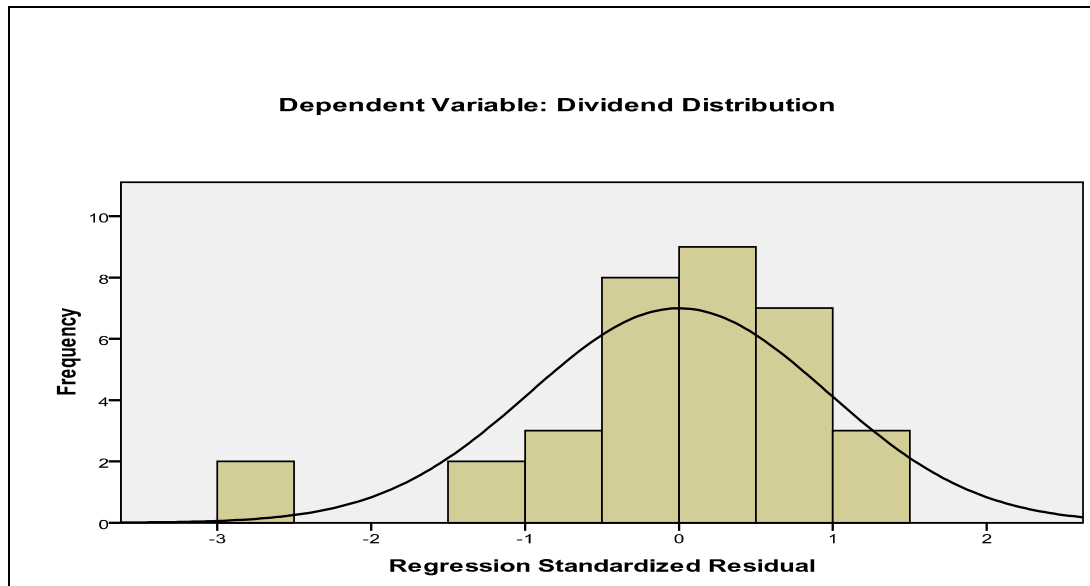
**Table 4.2.4: Coefficients of regression equation**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
$\alpha_0$	.928	.455		2.039	.047
$\alpha_1$	-.746	.168	-.701	-4.454	.000
$\alpha_2$	-.508	.198	-.487	-2.567	.003

**Source: Author Computation**



**Figure 4.1: Normality plot**



**Source: Author Computation**

Normality uses histogram or plot of residuals. It is assumed that the distribution from the histogram will take the shape of a normal curve and the plot of the residuals will form 45 degrees diagonal line for the normality test. The histogram/frequency polygon depicts a normal distribution as shown in Figure 4.1, thus the model can be recommended for forecasting.

### **4.3: Discussion of the findings**

The aim of carrying out this study was to investigate the clientele effects in dividend distribution for companies quoted at the NSE. The study exclusively depended on the secondary data to achieve the objective. The regression statistical analysis was used to determine the clientele effects in dividend distribution for companies quoted at the NSE. The output in the analysis showed that the model was accurate, that is, capital needs and tax (individual) explain 79.6 percent of the dividends distribution. It means that capital needs and tax (individual) are the main determinants of dividend distribution amongst the companies listed at NSE. The finding further

showed that there is direct relationship between tax (individual) and dividend distribution and an inverse relationship between capital needs and dividend distribution.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0: Introduction

In this chapter we discuss the main findings in summary form, draw conclusions, state the limitations and make recommendations

#### 5.1: Summary

The objective of the study was to investigate the clientele effects in dividend distribution for companies quoted at the NSE. The study used secondary data that was obtained from annual financial reports of companies listed at NSE.

To achieve the objective, information on capital needs, tax (individuals) and dividend distributions were computed from all the sampled data. A regression analysis was done and it established that a negative relationship existed between the dependent variable (dividend distributions) and the independent variables (capital needs, tax (individuals)).

The study results reveal that there is an inverse relationship between capital needs, tax (individuals) and dividend distributions. When capital need for firms are high, the dividend distribution reduces, that is firms tend to utilize their earnings to generate capital. At the same time when tax (individuals) is high dividend distribution reduces, that is most share holders would prefer non payment of dividends to avoid high taxation on their earnings. In such a situation shareholders would be better off by leaving the earnings in the firms for other investment purposes (wealth creation objective).

The analysis asserts that as the independent variable changes, it causes a negative change on the dependent variable. Therefore, as firms engage in more capital generation to boost their operations, the ripple effect will be reduced dividend distribution. Firms should therefore have to prudently manage their capital needs to achieve higher dividend distribution. This can be achieved by establishing stringent capital policies.

## **5.2 Conclusion**

One major finding of the study is that there is a strong negative relationship between capital needs, tax (individuals) and dividend distribution of firms listed at NSE. This is demonstrated in the part of the analysis where the proportion of coefficient of correlation (R) and coefficient of determination ( $R^2$ ) is high. Capital needs, tax (individuals) are therefore very important for a firm. For a company to operate effectively and efficiently in paying out dividends, it must tightly monitor and control its capital needs. The usage of the model developed to forecast dividend distribution is therefore recommended. On overall the finding of this study suggest that firms at the NSE prefer paying stocks to dividend. It means majority of the investors at the NSE are institutional investors. This is supported by a study conducted by Black and Scholes whereby they described institutional investors as the beneficiaries spending their wealth and find receiving stocks easier than dividend, Black and Scholes (1974). However, tax consideration is not a strong factor to consider on dividend distribution.

Whereas the results of this study did not indicate a clear clientele effect relationship, there is need to conduct further research at the NSE to establish clientele effects on dividend distribution using a different approach.

## **5.3: Limitations**

The data used was secondary data and therefore the accuracy may not be guaranteed. Apart from the accuracy other economic factors such as inflation would affect the performance of firms. There is therefore room for isolating all these factors in order to generate better predictive model for dividend distribution.

Local researchers on the subject of clientele effects in dividend distribution for companies quoted at the NSE were few and little literature was available. The literature on the international arena was also limited and concentrated on the more developed economies like the US, UK and China whose circumstances may differ from the situation in Kenya.

The study focused on public companies only leaving out private companies. The findings of this study cannot be generalized for private companies

#### **5.4: Recommendations**

From the findings of this study future research may be directed to investigating the clientele effects in dividend distribution for companies quoted at the NSE; more specifically its impact on dividend payout and dividend yield.

There is need for aggressive and sustained investor education by the Capital market Authority to investors to enlighten them on the operations of the Capital Market intermediaries and the fundamental of the trading at the NSE. Enforce stringent rules of disclosures hence adequate and reliable information for the stakeholders making them vibrant and effective at the NSE.

The research findings have shown that there is an inverse relationship between capital needs of a firm and dividend distribution. Therefore, policy makers should come up with proper capital generation policies that enhance earnings through prudent management of the firms operations. These policies should be reviewed periodically to ensure that they are competitive and in check with reality in the market.

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## **APPENDIX I: LIST OF FIRMS LISTED AT THE NSE**

### **1. AGRICULTURAL**

Eaagads Ltd

Kapchorua Tea Co. Ltd

Kakuzi

Limuru Tea Co. Ltd

Rea Vipingo Plantations Ltd

Sasini Ltd

Williamson Tea Kenya Ltd

### **2. COMMERCIAL AND SERVICES**

Express Ltd

Kenya Airways Ltd

Nation Media Group

Standard Group Ltd

TPS Eastern Africa (Serena) Ltd

Scangroup Ltd

Uchumi Supermarket Ltd

Hutchings Biemer Ltd

### **3. TELECOMMUNICATION AND TECHNOLOGY**

AccessKenya Group Ltd

Safaricom Ltd

#### **4. AUTOMOBILES AND ACCESSORIES**

Car and General (K) Ltd

CMC Holdings Ltd

Sameer Africa Ltd

Marshalls (E.A.) Ltd

#### **5. BANKING**

Barclays Bank Ltd

CFC Stanbic Holdings Ltd

Diamond Trust Bank Kenya Ltd

Housing Finance Co Ltd

Kenya Commercial Bank Ltd

National Bank of Kenya Ltd

NIC Bank Ltd

Standard Chartered Bank Ltd

Equity Bank Ltd

The Co-operative Bank of Kenya Ltd

#### **6. INSURANCE**

Jubilee Holdings Ltd

Pan Africa Insurance Holdings Ltd

Kenya Re-Insurance Corporation Ltd

CFC Insurance Holdings

British-American Investments Company (Kenya) Ltd

## **7. INVESTMENT**

City Trust Ltd

Olympia Capital Holdings ltd

Centum Investment Co Ltd

Trans-Century Ltd

## **8. MANUFACTURING AND ALLIED**

B.O.C Kenya Ltd

British American Tobacco Kenya Ltd

Carbacid Investments Ltd

East African Breweries Ltd

Mumias Sugar Co. Ltd

Unga Group Ltd

Eveready East Africa Ltd

Kenya Orchards Ltd

A.Baumann CO Ltd

## **9. CONSTRUCTION AND ALLIED**

Athi River Mining

**APPENDIX II: SECONDARY DATA**

Dividend Distribution(Pay out ratio)	Tax (Individual)	Capital needs (retained earnings)
0.006	0.05	0.994
0.016	0.05	0.984
0.02	0.05	0.98
0.036	0.05	0.964
0.038	0.05	0.962
0.048	0.05	0.952
0.046	0.05	0.954
0.033	0.05	0.967
0.029	0.05	0.971
0.007	0.05	0.993
0.005	0.05	0.995
0.004	0.05	0.996
0.011	0.05	0.989
0.008	0.05	0.992
0.013	0.05	0.987
0.002	0.05	0.998
0.005	0.05	0.995
0.041	0.05	0.959
0.057	0.05	0.943
0.067	0.05	0.933