

**OWNERSHIP STRUCTURE AND ITS EFFECT ON CORPORATE DIVIDEND  
POLICY FOR COMPANIES LISTED AT THE NAIROBI SECURITY  
EXCHANGE**

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## DECLARATION

This research project is my original work and has not been presented in any other University.

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## ABBREVIATIONS

NSE	- Nairobi Securities Exchange
UK	- United Kingdom
MM	- Modigliani and Miller
KCB	- Kenya Commercial Bank
BRITAK	- British American Insurance
NIC	- National Industrial Credit Bank
CONC	- Ownership Concentration
INST	- Institutional Ownership
MNG	- Managerial Ownership
FOR	- Foreign Ownership
FAM	- Full Adjustment Model
PAM	- Partial Adjustment Model
EPS	- Earnings Per Share
DPS	- Dividends Per Share
VIF	- Variance Inflation Factor

## ABSTRACT

This study investigates the relationship between types of ownership structure and dividend payments of Nairobi Securities Exchange (NSE) listed companies. A cross-sectional analysis of 33 sample firms for the years 2009 to 2011 was utilized.

The study examined the explanatory power of three alternative models of dividend policy, the full adjustment model, the partial adjustment model and the Waud model which are moderated by the possible effects of four types of ownership structure, namely ownership concentration, institutional ownership, managerial ownership and foreign ownership. Ownership concentration is measured by the summation of the percentage of shares controlled by ten major shareholders. Institutional ownership is measured by a percentage of equity owned by institutional investors, while, managerial ownership is measured by adding the total percentage of shares directly held by directors in the company, and foreign ownership is measured by the sum of all shares in the hands of foreign shareholders in the list of ten largest shareholders, either held through nominee companies or other corporate foreign share holdings.

The study found that The partial adjustment model had the highest explanatory power. It was also found that ownership concentration was the only variable that was positively and statistically significant in influencing dividends in every type of dividend model, a finding that is consistent with agency theory. This finding has policy implication since high dividend payments can be used for mitigating agency conflict as dividends can be substituted for shareholder monitoring. Hence, large shareholders have strong incentives to require higher dividend payments in order to reduce monitoring costs. Nevertheless, this study shows that dividend decisions of Kenyan companies are not influenced by the Structure of ownership.



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Over the past decades extensive research has been carried out regarding the relative importance of the factors determining corporate dividend policy. The large amount of net earnings distributed to shareholders in the form of dividends trouble researchers since in free and competitive markets dividend policy should not affect market values. The dividend puzzle has been attributed to the existence of capital market imperfections such as the presence of information asymmetries between managers and shareholders. There is ample evidence that corporate dividend policy is used by management for informational reasons and is functioning effectively as a signal for the firm's future prospects.

According to the dividend signaling theory, dividend policy constitutes a means of transfer of private information from the management to the shareholders regarding the firm's future prospects. Indeed, the empirical evidence shows not only that there exists a relationship between the dividend policy and the performance of the enterprise in the near past and in the future, (Miller, 1987; Benartzi, Michaely and Thaler, 1997, DeAngelo, DeAngelo and Skinner, 1992, 1996; Nissim and Ziv, 2001), but also that investors recognise the transfer of information through dividend policy and incorporate this information in the valuation of shares (among others, Aharony and Swary, 1980; Asquith and Mullins, 1983; Healy and Palepu, 1988).

Decision making process regarding dividend policy is the conflict of interests between managers and shareholders, because of the separation of ownership and control that exists in enterprises nowadays (Jensen and Meckling, 1976; Myers and Majluf, 1984; Jensen, 1986; Easterbrook, 1984). According to the agency cost model of dividends, dividend policy can constitute either a means of control of the managers by the shareholders. This is because payments of dividends alleviate the need for monitoring and incurring agency costs which comes due to shareholders and management conflicts. The high payout for instance can help to reduce the conflict arising out of the information asymmetry. It is

argued that companies which pay high dividend regularly may be raising capital more frequently from primary markets hence actors in the primary markets like financial institutions and banks would be monitoring the performance of the company hence shareholders need not incur monitoring costs. On the other hand, dividend policy can be a vehicle, through which managers can maximize their own welfare.

For many years there has been an agency conflict by institutional investors and managers on the issue of dividend corporate policies. The role of the institutional investors and managerial ownership on the level of earnings paid out by a firm as dividends and the claim that of the agency theory that institutional ownership can lead to the maintenance of dividends at high levels are still subjects that generate interest. One of the three hypotheses put forward by Pound (1988), concerning the possible effect of institutional investors on corporate performance through their relationship with managers is that of strategic alignment. According to this hypothesis, the firm's decisions regarding dividend policy are made with the aim of serving the interests of institutional investors.

Two hypotheses regarding the influence of institutional investors on company's investment policy can be found in literature. One theory holds that institutional ownership contributes to the adoption of a long-term development policy . This happens because institutional investors make their placements according to the long-term perspectives of the enterprises, evaluating positively the adoption of investment plans concerning Research and Development (Aoki. 1984; Hansen and Hill, 1991; Chaganti and Damanpour, 1991; Jarrell and Lehn, 1985). The counter theory is that specific institutional investors adopt a policy of short-term evaluation of corporate performance (the hypothesis of short-sighted institutional investors) and will therefore prefer dividends now than let the company invest its earnings.

Further, the dividend signalling hypothesis asserts that dividends and institutional ownership can be viewed as two alternative means of signalling, since the presence of the specific investors can, by itself, act as a signal of satisfactory profitability, mitigating the need for the maintenance of a high dividend yield for informational reasons. However,

even if the choice by institutional investors constitutes an efficient signal regarding the companies' perspectives, institutional ownership cannot substitute the high dividend yield, because it is a factor that cannot be controlled by managers.

Jensen and Meckling, 1976; Jensen and Murphy. 1990; Morck et al. 1988, argued that the more managerial ownership is enhanced, the more likely it is that the interests of management converge with those of external shareholders. On the other hand, however, the augmented concentration of managerial ownership constitutes a means of empowerment of managers, giving them the opportunity to serve their personal interests, as it contributes to the reduction of the strict control imposed by shareholders (management entrenchment hypothesis) (See Fama and Jensen, 1983; Demsetz. 1983).

As the foregoing review shows, the direction and quantum of effect of a company's ownership structure on the dividend policy is an issue still open to academic contestation. The current study will attempt to contribution to the resolution of the debate. From a review of prior literature, dividends are expected to be positively related to ownership concentration, ownership dispersion, institutional ownership, and foreign ownership. The relationship to managerial ownership would be negative.

## **1.2 Statement of the Problem**

The study intended to examine the role and effects of ownership on the dividend policy of firms at the NSE. Dividends are payments made by a company to its shareholders, usually after a company earns a profit. Dividend policy is a set of company rules and guidelines used to decide how much the company will pay out to its shareholders. Dividend policy has been viewed as an issue of interest in the financial literature and one of the most controversial topics in finance. Despite a large body of literature on dividends and payout policy, researchers have yet to reach a consensus on why firms pay dividends and what determines the payout ratio.

Taking into consideration various capital market imperfections, a considerable amount of theory and model are suggested to explain the dividend policy of companies. Signaling

models are based on the assumption that managers have more information about the company's future cash flow than do individuals outside the company, and they have incentives to signal that information to investors (Gugler, 2003). Unexpected changes in dividend policy are used to mitigate information asymmetries between managers and owners (Frankfurter and Wood Jr., 2002). On the other hand, agency theory posits that by distributing resources in the form of cash dividends, internally generated cash flows are no longer sufficient to satisfy the needs of the companies. As a result, companies will visit the capital market more frequently for financing needs; thereby bring them under the greater scrutiny of the capital market (Easterbrook, 1984). Therefore, the payment of dividends provides the incentive for managers to reduce the costs associated with the principal/agent relationship. Agency theory seeks to explain corporate capital structure as a result of attempts to maximize shareholder wealth since dividends can act as a 'bonding' mechanism to reduce the agency costs arising from the conflict between managers and shareholders.

It is also important to note that the extent to which the company's dividend payout policy is effective in reducing the expected agency costs may also depend on its ownership and control structure. Literature of financial economics is replete with hypotheses (and counter hypotheses) seeking to explain the efficacy of ownership structure as a solution to the agency conflict as demonstrated by free cash flow problem and the opportunistic behaviour of management. It is hypothesized that institution and managerial interests in the ownership stake of a firm can make the firm adopt dividend policies that mitigate (or exacerbate) the agency conflict.

For example, one study by Mat Nor and Sulong (2007) had examined the relationship between ownership structure and dividends in Malaysia, using four types of ownership structures, namely ownership concentration, government ownership, foreign ownership and managerial ownership. Their findings show a low explanatory power (between 0.118 and 0.124). On the other hand, a study in UK by Short, Zhang and Keasey (2002) that examined the link between corporate dividend policy and the ownership of shares by institutional investors and managers, using four models of dividend policy, the full adjustment model, the partial adjustment model, the Waud model and the earnings trend

model found a very high explanatory power (between 0.843 and 0.993). The four models used in Short, Zhang and Keasey (2002), describe the adjustment of dividends to changes in several measures of corporate earnings, and were modified by the addition of dummy variables representing institutional and managerial ownership, in order to determine whether the presence of the specific classes of investors in the ownership structure affect the process of determination of the level of the earnings that are being distributed. The current study is motivated by Short, Zhang and Keasey (2002), and attempts, in the context of Nairobi Securities exchange, to examine the hypothesized relationship between corporate dividend policy and the various types of ownership structure by using dividend payout models.

Related local studies include Karanja (1987) on dividend practices of quoted companies, Farida (1993) on determinants of dividends policy, Iminza (1997) on information content of dividend announcements, Maina (2002) on the relationship between dividends and the investment decision, and Mulwa (2006) on relationship between dividend changes and future profitability. The researcher is not aware of any recent local study that focuses on the ownership structure of companies and its impact on dividend policy. Hence the need for this study.

### **1.3 Objectives of the Study**

The objective of the study was: To examine the relationship between various ownership structures based agency cost proxies on dividend policy.

### **1.4 Importance of the Study**

The findings of the study would be useful to diverse players in the corporate world and financial markets. Specifically, the following parties will find the study invaluable.

Management of firms may be able to make more informed dividend decisions. They can also balance the firm's needs for internally generated investible funds and the cash needs of its shareholders. They will also be in a better position to maximize value of the firm.

For Academics and researchers, the study provides some platform for quality discussion

and debates among academics, policy makers, professionals and financial analysts. Further it will help resolve a controversial area in corporate finance, namely the dividend puzzle.

Investors, both current and prospective will make better informed decisions regarding dividend paying and non-dividend payers. The investors will group themselves in appropriate clienteles depending on their preferences.

The government and regulatory bodies play a significant role in creating an enabling environment for capital markets. The study could help the authorities encourage local ownership by instituting enabling tax and fiscal policies.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews the literature on ownership structure, dividend policies and their many determinants. Section 2.2 -2.5 reviews the many dividend theories , beginning from Modigliani and Miller 1961 to present .Section 2.6 reviews literature on the ownership structure followed by dividend policy models in Section 2.7 . Section 2.8 concludes the Chapter with review of empirical studies.

#### **2.2 Dividend Policy**

Dividends are payments, or distributions, made to shareholders from the firm's earnings generated in the current or previous periods. For preferred shares, it is generally a fixed amount and for common shares, the dividends vary with the company returns. Hence dividends can be described as a reward to the shareholders for their investment in the company through distribution of the company's income. Dividends per share are calculated as the total amount of distributed dividends divided by the number of outstanding shares, and are adjusted for capital changes, in order for the inter-period comparison of the results to be meaningful.

A firm's dividend policy can be defined as the plan of action adopted by its directors whenever there is a dividend decision to be made. Dividend policy determines the distribution of earnings between shareholders and reinvestment in the firm. The main elements included in the policy are: The mode of payment: - companies may decide to pay cash dividends or offer bonus issue to their shareholders, the frequency of payment:- companies may decide to pay both interim and final dividends while others may decide to pay only final dividends at the end of trading period and how much to pay: after considering earnings for a particular trading period and future growth projections.

The issue of dividend policy is important for several reasons. First, researchers have found that a firm uses dividends as a mechanism for financial signaling to the outsiders

regarding the stability and growth prospects of the firm. Secondly, dividends play an important role in a firm's capital structure. Yet another set of studies have established the relationship between firm dividend and investment decisions. According to the "residual dividend" theory, a firm will pay dividends only if it does not have profitable investment opportunities, i.e., positive net present value projects.

Further, a Firm's stock price is affected, among other things, by the dividend pattern. Firms usually do not like to reduce or eliminate dividend payments [Woolridge and Ghosh, 1988 and 1991]. hence, they make announcements of dividend initiation or increases only when they are confident of keeping up with their good performance. Moreover, because the success of a financial manager is tied to the maximization of shareholder wealth (and firm value), hence he or she must understand the dynamics of dividend policy. Indeed, the market value of a firm is dependent upon its stock price.

### **2.3 Relevance of Dividend Policy to the Value of the Firm**

Dividend policy is controversial and for the last four decades finance scholars do not seem to have come to a consensus on the subject. There are two major schools of thought among finance scholars regarding effect of dividend policy on a firm's value. One group argues that dividend policy does not have a significant effect on a firm's value while the other group argues that the dividend policy a firm adopts has an effect on its value.

### **2.4 Arguments against Dividends**

It is argued that little or no dividend payout is more favorable for investors. Supporters of this policy point out that taxation on a dividend are higher than on capital gain. The argument against dividends is based on the belief that a firm that reinvests funds (rather than pays it out as a dividend) will increase the value of the firm as a whole and consequently increase the market value of the stock.

According to the proponents of the no-dividend policy, a company's alternatives to paying out excess cash as dividends include: undertaking more projects, repurchasing the company's own shares, acquiring new companies and profitable assets, and reinvesting in financial assets. This school of thought is further supported by the following theories;



### 2.4.1 Dividend Irrelevance theory

In their Journal 'Dividend Policy, Growth and Valuation of Shares', Modigliani and Miller (1961) argued that in perfect capital market, perfect certainty and rational behavior, dividend policy is irrelevant in firm valuation. An additional shilling in dividends lowers the net worth of a firm by one shilling which in efficient stock market implies that the stock holders units are worth one shilling less.

MM further argued that dividend policy has no effects on either the price of the firm's stock or its cost of capital. A firm's value, they argued is determined by the basic earnings power and the firm's risk and not the distribution of earnings. The firm's value is determined by earnings power of its assets or its investment policy, and the manner in which the earnings stream is split between its retained earnings and dividends does not affect its value. Hence, the value of a firm depends on the investment decision and not the dividend policy.

Under this theory, Modigliani and Miller made several assumptions: There are no taxes charged on income, there are no stock floatation costs, there are no transaction costs and there is existence of homogenous information or information asymmetry.

The theory further contends that investors only care about the total returns they receive, not whether they received those returns in the form of dividends or capital gains. Thus if the dividend irrelevance theory is correct, there exists no optimal dividend policy because dividend policy does not affect the value of the firm.

They further argued that shareholders are able to replicate any dividend pattern that a firm can pay. If investors feel that the current dividend is too low, they can sell some of their shares to realize their desired cash distribution. If they are higher than they desire, then they can buy additional shares in the same firm. This means that the investors are only concerned about the total return on their investments hence:

$$\text{Total Return} = \text{Dividend payout} + \text{capital gains.}$$

### **2.4.2 Residual dividend theory**

Under these circumstances, each period the company must decide whether to retain earnings or to distribute part or all of them to stockholders as cash dividends as residual earnings i.e. earnings left over after all suitable (positive NPV) investment opportunities have been financed. With the residual earning, the primary concern of firm's management is investment. Dividend policy becomes irrelevant; it is treated as a passive rather than active decision.

## **2.5 Arguments for Dividends**

The proponents of this argument are of the view that, a high dividend payout is more important for investors because dividends provide certainty about the company's financial well being. Dividends are also attractive for investors looking to secure current income. The decrease and increase of a dividend distribution can affect the price of a security. Lowering or omitting dividend distributions would negatively affect companies that have a long-standing history of stable dividend payouts; increasing dividend payouts or making additional payouts of the same dividends would positively affect these companies. Furthermore, companies without a dividend history are generally viewed favorably when they declare new dividends. The following dividend relevance theories further support this school of thought;

### **2.5.1 Information Content or Signaling Effect of Dividend**

Ross, (1977) observed that there is a strong association between dividend payment and share prices. This theory states that investors regard dividends as signals of management's forecast earnings. If for instance investors expect a company's dividend to increase by 5%. then the stock price generally will not change significantly on the day the dividend increase is announced. If however, investors expect an increase of 10% but the company actually increases the dividend by 20%, this generally would be accompanied by an increase in stock price. Conversely, a less than expected dividend increase, or a reduction, generally would result in a price decline.

It is well known that firms are usually reluctant to cut dividends and therefore managers do not raise dividends unless they anticipate higher or at least stable earnings in the future

to sustain higher dividends. This therefore means that a larger than expected dividend increase is taken by investors as a signal that the firm's management forecast improved earnings in the future, whereas a dividend reduction signals a forecast of poor earnings. Thus it can be argued that investors' reaction to changes in dividend payments do not show that investors prefer dividends to retained earnings, rather, the stock price changes simply indicate that important information is contained in the dividend announcements. Thus, effective dividend announcements provide investors with information previously only known to management.

In summary, the dividend signaling theory has several implications: Firms will pay dividends to signal quality to the market, firms will be very reluctant to cut their dividend because that will provide a negative signal, firm's will not increase their dividend unless they feel comfortable that they can maintain the dividend in the future; as a result, the pattern in dividend payments will be much smoother than the pattern in earnings or cash flows, dividend increases are associated with positive stock price changes, dividend cuts are associated with negative stock price changes and firms may forego projects that add value to the firm in order not to have to cut the dividend.

Ezra (1963) states that dividend may offer evidence of a firm's ability to generate cash. As a result, dividend policy of a firm affects share prices. For instance Kakuzi Ltd did not pay dividends for the last year's trading period. This has significantly influenced the company's share prices at NSE. The shares demand as reflected by trading volume has declined with no trading at all reported in some days, for example on 17-03-2008. In contrast, there has been a lot of trading in shares of companies that are paying dividends for instance Access group, Barclays Bank, Equity bank and KCB.

### **2.5.2 Bird in the Hand Theory**

MM's assumption that dividends do not affect the cost of capital has been hotly contested. Gordon and Linter (1963) argue that investors prefer to receive dividends today rather than wait for capital gains. They argue that current dividends are certain and resolve uncertainty in the investors mind about the future. Because rational investors are

risk averse preferring current to future dividends, near dividends are therefore discounted at a lower rate in comparison to future dividends. Because of this, cost of equity reduces with high payout ratios.

In responding to this Modigliani and Miller stated that, investors are indifferent between dividends and capital gains hence dividend policy has no effect on the cost of capital. They further argued that many, if not most of the investors would reinvest dividends in the same or a similar firm, and further they are concerned about the total risk of the cash flows to the firm and not themselves.

### **2.5.3 Tax Differential Theory**

Litzenberger and Ramaswamy (1979), argue that investors have to pay taxes on dividends received and capital gains realized. Capital gain is the gain to investor from selling a stock, bond or mutual fund at a higher price than the purchase price. The capital gain is usually the amount realized (net sales price) less your investment (adjusted tax basis) in the investment. A capital gain may be short-term (one year or less) or long-term (more than one year) Capital gains tax rate is lower or not levied at all than ordinary income tax rate and also is payable when the gain is realized. Hence from the taxation viewpoint, investors should prefer capital gains to dividends. The value of a firm with a low pay out ratio should therefore be higher than the one with a higher payout ratio. Due to this Litzenberger and Ramaswamy argued that MM's assumption that taxes do not exist is far from reality.

### **2.5.4 Clientele Effect**

Pitet (1977) argued that there is a tendency of a firm to attract the type of investor who likes its dividend policy. For instance stockholders such as retired individuals prefer current dividends to future capital gains, so they require a firm to pay out a higher percentage of its earnings. Other stockholders (especially young investors) have no need for current income hence prefer a low pay out ratio since they prefer to receive their earnings in future.

If investors could not invest in companies with different dividend policies, it might be very expensive for them to achieve their investment goals. Investors who prefer capital gains could reinvest any dividends they receive, but first they would have to pay taxes on the income. In essence, then, a clientele effect might exist if stockholders are attracted to companies because they have particular dividend policies. Consequently, we would expect the stock price of a firm to change if the firm changes its dividend policy because investors will adjust their portfolios to include firms with the desired dividend policy.

In response to this MM argued that one client is as good as any other and the existence of clientele effect does not suggest that one dividend policy is better than any other policy. In absence of market imperfections, the switching is quite healthy as a firm would attract some and lose other investors.

### **2.5.5 Positive dividends effects**

Apart from the tax issues, we must recognize an argument for a positive dividend effect. This is the possibility of a preference for dividends on the part of investors for behavioral reasons. Dividends payment is useful for diversification of investments in an uncertain world. Shefrin and Statman (1984) reason that some investors are reluctant to sell shares because they will regret if stock prices rise. For them dividends and the sale of stock for income are not perfect substitutes. A second argument they advanced is that although many investors are willing to consume out of the dividend income they are unwilling to dip into capital again. To them dividends and the sale of stock are not perfect substitutes for investors. For behavioral reasons, then certain investors prefer dividends.

## **2.6 Ownership Structure**

Ownership structure refers to composition of shareholders of a given firm. Ownership structure in turn influences the shareholders rights regarding crucial decisions in a firm including dividend policy. This factor is important bearing in mind agency conflicts that arise from divergence of ownership and control.

Jensen and Meckling (1976) argued that modern corporations are plagued by two types of

agency conflicts. First, an agency conflict can occur between shareholders and managers, Managers who own less than 100% of the firm's equity may not act in the best interests of the shareholders, potentially running the firm so as to maximize their private benefits rather than those of the shareholders. Second, there can be an agency conflict between shareholders and creditors. Here, an agency conflict occurs when shareholders invest the borrowed funds in risky projects, thereby exposing the creditors to the level of risk that is not commensurate with the return they are promised.

Dividend payouts have been argued to mitigate agency costs in, at least, two ways:

First, predicated on the early work by Berle and Means (1932) on the separation of ownership and control, Jensen (1986) argued that a firm with substantial free cash flows is inclined to over investment funds by adopting marginal investment projects with negative net present values. If managers are over investing, an increase in dividend will, all else being equal, reduce the amount of free cash flows, thereby mitigating the overinvestment problem. Hence, dividend payouts helps control agency problems by getting rid of the excess cash that otherwise would result in unprofitable projects.

Second, Easterbrook (1984) argues that dividends function as a mechanism for controlling agency costs by exposing the firm to the primary capital market monitoring. Shareholders of most listed firm may be grouped into individual investors, institutional investors and managers.

The institutional investors and managers have been found to play a very critical role with respect to corporate dividend policy.

### **2.6.1 Institutional investors**

An institutional investor is an entity, company, mutual fund, insurance corporation, brokerage firm, government or other such group that has a large amount of money or assets to invest. These investors are responsible for a great percentage of the overall volume for stocks, bonds, and mutual funds. (For example the government owns 30% in KCB, BRITAK owns 10% of Equity Bank, First Chartered Securities holds 15.85% of NIC Bank). Because they are generally assumed to have a greater knowledge of

investments and risk, they are less restricted in their investment activities than individuals. Hence Institutional investors are covered by fewer protective regulations because it is assumed that they are more knowledgeable and better able to protect themselves.

According to agency theory, institutional ownership can lead to the maintenance of dividends at high levels. One of the three hypotheses put forward by Pound (1988), concerning the possible effect of institutional investors on corporate performance through their relationship with managers, is that of strategic alignment. According to this hypothesis, mutually beneficial alliances are developed between institutional investors and managers. As a result, the decisions that are being made regarding dividend policy aim at serving the interests of institutional investors.

According to dividend signaling hypothesis, dividends and institutional ownership can be viewed as two alternative means of signaling, since the presence of the specific investors can by itself, act as a signal of satisfactory profitability, mitigating the need for the maintenance of a high dividend yield for informational reasons. For example the buying of 25% of Equity Bank by Helios investors has been viewed as a signal for good future performance of the bank which has resulted in share price gains from Kshs.122 to Kshs. 150. However, even if the choice by institutional investors constitute an efficient signal regarding the companies' perspectives, institutional ownership cannot substitute the high dividend yield, because it is a factor that cannot be controlled by managers.

### **2.6.2 Managerial ownership**

Managerial ownership refers to the percentage of shares held by the shareholders that take part in the company's management, either through their natural presence or representation in the Board of Directors, or through the undertaking of managerial tasks - or through a combination of the two.

Managerial ownership constitutes a means of empowerment of managers, giving them the opportunity to serve their personal interests, as it contributes to the reduction of the

strict control imposed by shareholders (management entrenchment hypothesis) (Weston, 1979; Fama and Jensen, 1983; Demsetz, 1983). Even in this case, however, the degree of differentiation in their motives and behavior depends on the level of managerial ownership, as the additional welfare stemming from the maximization of their own wealth is counterbalanced by the negative effects on the wealth of shareholders, a group to which they also belong (Fama, 1983). As a result, it is expected that, for lower levels of managerial ownership, the ownership of shares by managers leads to the alignment of their interests with those of external shareholders, usually resulting in a high dividend yield. For higher levels of managerial ownership, however, the ownership of shares by managers can lead to distortions in the operating decisions that they make. The policy of maximization of their personal welfare, which is adopted in this case is expected to result in lower dividend yields.

### **2.6.3 Ownership Concentration**

In concentrated ownership companies, large shareholders could find less need for using dividends as a disciplining mechanism if they have strong board representation (Renneboog and Szilagyi, 2006). On the other hand, according to La Porta *et al.* (2000a) larger controlling shareholders could expropriate corporate wealth from other minority shareholders and enjoy private benefits instead of distributing dividends to shareholders. Therefore, to circumvent the problem a positive relationship was expected between ownership concentration and dividends.

### **2.6.4 Ownership Dispersion**

The greater the number of shareholders, the greater the dispersion of ownership. Hence, agency costs will increase and the need for monitoring managerial action also increases. If dividends can alleviate this problem, a positive relationship between ownership dispersion and dividend is expected.

### **2.6.5 Foreign Ownership**



According to agency theory, foreign investors who are well-informed and hold a substantial share can play their monitoring role on management and reducing the agency costs, and therefore, companies are more likely to increase dividends (Easterbrook, 1984; Jensen, 1986). Thus, a positive relationship was therefore expected between foreign ownership and dividends.

## 2.7 Dividend Policy Models

### 2.7.1 The full adjustment model

According to the full adjustment model, the year-to-year changes in earnings are considered permanent and the companies adjust fully the dividends that they distribute to the new level of earnings, according to a target payout ratio ( $r$ ). As a result, the relationship between the change in dividends ( $D$ ) and that of earnings ( $E$ ), for firm  $i$  at time  $t$ , is given by:

$$D_{ti} - D_{(t-1)i} = a + r(E_{ti} - E_{(t-1)i}) + \mu_{ti}$$

The hypothesis that institutional investors and managerial ownership affect dividend policy means that companies with different levels of ownership by the specific classes of investors may have different target payout ratios ( $r$ ).

### 2.7.2 The partial adjustment model

According to the partial adjustment model (Lintner, 1956), the desired level of dividends ( $D^*$ ) for firm  $i$  at time  $t$  is related to earnings ( $E$ ), according to the target payout ratio ( $r$ )

$$D^*_{ti} = r E_{ti} \quad (1)$$

However, the adjustment of dividends to the earnings' level each year is not full. On the contrary, enterprises move towards the desired level of distribution gradually and dividends adjust only partially to the changes in earnings. As a result the model takes the form:

$$D_{ti} - D_{(t-1)i} = a + c(D^*_{ti} - D_{(t-1)i}) + \mu_{ti} \quad (2)$$

Where  $a$  is a coefficient representing the reluctant of managers to cut the dividends, whereas  $c$  is the speed of an adjustment coefficient to the desired level of dividend distribution.

### 2.7.3. The earnings trend model

Examining the descriptive power of several alternative models of dividend policy Fama and Babiak (1968) observed that both past earnings and past dividends play a significant role. As a result, they proposed a model, which assumes that the earnings (E) of firm i at time t are given by:

$$E = (1+y) E_{(t-1)i} + \mu_{ti} \quad (3)$$

Where y is a factor representing the trend in earnings.

As in the previous models, the level of desired dividends (D\*) is connected with the level of expected earnings according to the target payout ratio (r):

$$D^*_{ti} = rE_{ti}$$

At the same time, it is assumed that dividends adjust fully to the expected change in earnings  $\lambda E_{(t-1)i}$ , but only partially to the unexpected change in earnings.

$$D_{ti} - D_{(t-1)i} = a + c(r(E_{ti} - yE_{(t-1)i}) - D_{(t-1)i}) + ryE_{(t-1)i} + \mu_{ti} \quad (4)$$

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter sets out the research design, the population and sample, the data analysis methods and the tests that will be conducted. The design of the study is analytical, while the population are the companies listed at the NSE. We employ three dividend models to test the effect of ownership structure on dividend policy.

#### **3.2 Research Design**

This study employed an analytical design to test the impact of ownership structure on dividend policy. The design was aimed at examining the hypothesized relationship between corporate dividend policy and the ownership of shares by institutional investors and managers. A regression analysis of the data gathered basically from the secondary sources was carried out using the three models of dividend policy, as suggested in the literature review: the full adjustment model, the partial adjustment model (Lintner, 1956) and the Waud model (Waud, 1966). These models describe the adjustment of dividends to changes in several measures of corporate earnings and have been modified by the addition of variables representing institutional, managerial and foreign ownership, in order to determine whether the presence of the specific classes of investors in the corporate ownership structure affect the process of determination of the level of the earnings that are to be distributed as dividends.

#### **3.3 Population and Sampling Techniques**

The population of this study were all the 60 firms listed at the Nairobi Stock Exchange, as at December 2011, both in the main and alternative segments. The unit of analysis is a survey of 33 firms out of the 60 firms quoted at the NSE during the period of 2009 to 2011. For a firm to be included in this sample, it has to meet several criteria. First, it has to be listed at the NSE without interruption during the period under consideration, for reasons of data collection concerning the ownership structure. Secondly, for a firm to be included in the final sample, it had to be quoted at the NSE for at least one year before

the year of analysis. These conditions are necessary so as to rule out the possibility of changes in the ownership structure as a consequence of a new listing and since the variables included in the models under examination refer to year-to-year changes in their respective values, only those firms that were present every year, continuously, for the entire period will be included in the sample. Additionally any firms with gaps in requisite data were excluded.

Companies whose ownership structure and object of activity changed during the period under consideration as a result of mergers, acquisition or takeover were also be excluded. Firms in the finance and investment sector were also be excluded from the study due to the use of different financial accounting systems and also the fact that their capital structure is more or less defined by regulatory bodies.

### **3.4 Data and Data Collection Methods**

Data was collected using secondary sources mainly through the financial statements and annual records filed with the registrar of companies, and the NSE yearly guide and handbook of June 2012. Internal secondary sources from within the companies are also to be used. Such records include the companies accounting and financial records and audited annual reports. Data about the composition and percentage of institutional and managerial share holding of the companies sampled was collected, so was the annual dividend payment and the annual firm's earnings.

### **3.5 Measurement of Variables**

The models that were used examined the relationship between dividends (dependent variable) and earnings (independent variable). We also examined the effect of ownership variables on the amount of earnings paid out as dividends. The variables were determined as follows:

#### **3.5.1 Dividends (*D*)**

The dividends variable was calculated as the total amount of distributed dividend divided

by the number of ordinary outstanding equity shares relating to the accounting year. Dividends per share (D) is the proportion of earnings paid out to the shareholders as a return for the capital invested divided by the total number of shares outstanding, adjusted for capital changes in order for the inter-period comparison of the results to be meaningful.

### **3.5.2 Earnings (E)**

Earnings variable was calculated as net profit derived from normal trading activities after depreciation and other operating provisions divided by the number of ordinary outstanding shares. Specifically, it was calculated as the net before tax profits divided by the number of outstanding shares also adjusted for capital changes.

### **3.5.3 Ownership Concentration (CONC)**

Following Hansen *et al.* (1994), Harada and Nguyen (2006) and Khan (2006), ownership concentration was measured by taking the percentage ownership of the ten largest shareholders divided by total shareholding.

### **3.5.4 Institutional Ownership (INST)**

Alli *et al.* (1993) and Moh'd *et al.* (1995), Amidu (2006) and Kouki and Guizani (2009) defined institutional ownership as a percentage of equity owned by institutional investors such as insurance companies, unit trusts, mutual funds, pension funds and financial companies. This empirical analysis used variable (INST), which is the percentage ownership by institutions among the ten largest shareholders.

### **3.5.5 Managerial Ownership (MNG)**

Following Nor and Sulong (2007), managerial ownership was measured by adding the total percentage of shares directly held by directors in the company. In other words, managerial ownership is the percentage of shares held by the shareholders who take part in the company's management either through their natural presence or representation in the board of directors, or through undertaking of managerial tasks or both. The empirical analysis used the variable (MNG) as a measure of managerial ownership.

### 3.5.6 Foreign Ownership (FOR)

Following Nor and Sulong (2007), the sum of all shares in the hands of foreign shareholders in the list of ten largest shareholders, either held through nominee companies or other corporate foreign share holdings, will be identified to calculate the total percentage of foreign shareholdings (FOR).

## 3.6 Data Analysis

Following the methodology of Short, Zhang and Keasey (2002), three dividend models were used to test the hypothesis of a link between ownership structure and dividend policy: the Full Adjustment Model, the Partial Adjustment Model (Litner, 1956) and the Waud Model (1966). These models describe the adjustment of dividends to changes in several measures of corporate earnings. Nevertheless, these models have been modified to account for the possible effects of ownership structure in determining the level of the corporate dividend.

### 3.6.1 The Full Adjustment Model (FAM)

According to the full adjustment model, changes in earnings are considered as permanent. Therefore, companies will adjust their dividends ( $D$ ) to the new level of earnings ( $E$ ) to achieve the companies' desired payout ratio ( $r$ ). Consequently, the relationship between the changes in earnings and changes in dividends, for company  $i$  at time  $t$ , is given by:

$$D_{t i} - D_{(t-1) i} = \alpha + r(E_{t i} - E_{(t-1) i}) + \mu_{t i}$$

The hypothesis that ownership structures affect dividend policy means that companies target payout ratio ( $r$ ) for different levels of ownership classes.

Therefore, in this case, the model becomes:

$$D_{t i} - D_{(t-1) i} = \alpha + r(E_{t i} - E_{(t-1) i}) + rCONC(E_{t i} - E_{(t-1) i}) * CONC + rINST(E_{t i} - E_{(t-1) i}) * INST + rMNG(E_{t i} - E_{(t-1) i}) * MNG + rFOR(E_{t i} - E_{(t-1) i}) * FOR \quad (\text{Model 1, FAM})$$

### 3.6.2 The Partial Adjustment Model (PAM)

The partial adjustment model assumes that the desired level of dividends ( $D^*$ ) for company  $i$  at time  $t$  is related to its earnings ( $E$ ), according to the target payout ratio ( $r$ ):

$$D^*_{t i} = rE_{t i}$$

Nevertheless, the company adjusts only partially to the target dividend level. In contrast, firms move towards the desired level of distribution gradually and dividends adjust only partially to the changes in earnings. As a result, the model takes the form:

$$D_{t i} - D_{(t-1) i} = a + c(D^*_{t i} - D_{(t-1) i}) + \mu t i$$

Where  $a$  is a coefficient representing the refusal of managers to reduce dividends, whereas  $c$  is the speed of an adjustment coefficient that represents the extent to which the management wishes to 'play-safe' by not amending to the new target immediately.

Assuming that companies with significant ownership classes have different target payout ratios ( $r$ ), the model becomes:

$$D_{t i} - D_{(t-1) i} = a + crE_{t i} + crCONC_{t i} * CONC + crINST_{t i} * INST + crMNGE_{t i} * MNG + crFORE_{t i} * FOR - cD_{(t-1) i} + \mu t i \quad (\text{Model 2, PAM})$$

### 3.6.3 The Waud Model (WM)

The Waud model integrates elements of the both partial and full adjustment model. It believes that the target dividends  $D^*$  are the proportional to the long-run expected earnings,  $E^*$ :  $D^*_{t i} = rE^*_{t i}$ .

On one hand, the actual dividend change will follow a partial adjustment model:

$$D_{t i} - D_{(t-1) i} = a + c(D^*_{t i} - D_{(t-1) i}) + \mu t i$$

The formation of expectations follows an adaptive expectation model:  $E^*_{t i} - E^*_{(t-1) i} = d(E_{t i} - E^*_{(t-1) i})$

According to this model, dividends are the results of a 'partial adjustment' and the 'adaptive expectations'. Therefore, assuming a possible difference in payout ratio for firms with different ownership classes, the model becomes:

$$D_{t i} - D_{(t-1) i} = ad + cdrE_{t i} + cdrCONC_{t i} * CONC + cdrINST_{t i} * INST + cdrMNGE_{t i} * MNG + cdrFORE_{t i} * FOR + (1-d-c)D_{(t-1) i} - (1-d)(1-c)D_{(t-2) i} - \mu t i \quad (\text{Model 3, WM})$$

### **3.7 Conclusion**

Miller and Modigliani (M&M) claim that under assumption of perfect capital market, dividends are irrelevant and they have no influence on the share price. Nevertheless, when capital markets are imperfect and when the assumptions made by M&M are relaxed, some researchers have argued that dividends do matter; hence firms should pursue an appropriate dividend policy. A set of explanatory variables has been hypothesized to distinguish the companies' specific characteristic that influence on the dividend distribution.



## **CHAPTER FOUR**

### **DATA ANALYSIS AND FINDINGS**

#### **4.1 Introduction**

This chapter discusses the findings of this study on ownership structure effect on the corporate dividend policy based on three payout models, namely the full adjustment model (FAM), the partial adjustment model (PAM), and the Waud model. We commence the analysis by examining the descriptive statistics of the variables, followed by a correlation analysis of the strength of the relationship between variables.

#### **4.2 Descriptive Analysis**

A summary of descriptive statistics is presented in Table 4.1 for the 33 companies covered in this study. It can be seen that the standard deviation for dividends, which is the dependent variable is 2.9 which can be considered as high, thus, it indicates a substantial variation in the amount of dividend distribution in NSE-listed companies. This is due to some companies not disbursing any dividend while some companies distribute their dividend as high as Sh. 11. The average dividend distributed among the sampled companies is Sh. 2.08 per share. The earnings per share show a mean of Sh.6, with a minimum value of Sh.-8.8 and a maximum of 40.8. The EPS is positively skewed with a median of Sh.2.9.

In terms of ownership variables, the range of firm ownership concentration represented by the percentage of ownership owned by ten largest shareholders (CONC) is from 27 percent to 94 percent, with a standard deviation of 13.7 percent. The mean percentage of the CONC is 72.7 percent which implies that almost 3-quarters of shares ownership is concentrated in hands of ten largest shareholders among Kenyan firms. However, in the study by Abdullah (2009) it was found that the mean percentage of ownership concentration is about 40 percent for Malaysian companies. The substantial mean value for Kenyan companies, the negative skewness, and the significant value of the median of 73 percent means that Kenyan ownership of corporations is highly concentrated. Ownership dispersion is indeed very low in Kenyan companies.

**Table 4.1: Summary Descriptive Statistic**

The variables employed in the study are dividends per share (DPS), earnings per share (EPS), concentration in ownership (CONC), institutional ownership (INST), managerial ownership (MNG), and foreign ownership (FOR).

	MEAN	ST.DEV.	MAXI MUM	MINI MUM	MEDIAN	SKEW	KURTOSI S
DPS	2.079286	2.905286	11	0	0.8	1.766768	1.885567
EPS	6.000107	8.041985	40.76	-8.84	2.915	1.97894	5.920369
CONC	0.726864	0.136855	0.94	0.274	0.7331	-1.55117	3.751037
INST	0.692761	0.151272	0.94	0.261	0.7235	-1.07108	1.480835
MNG	0.015939	0.050977	0.2063	0	0	3.3409	9.712818
FOR	0.247343	0.245574	0.72	0	0.2606	0.380809	-1.39879

For institutional ownership (INST), the mean percentage is about 69 percent which implies that about 70 percent of share ownership is in the hands of institutional shareholders such as holding companies, insurance companies, unit trusts, mutual funds, pension funds and financial companies. The range is from 26 percent to 94 percent and showed a 15 percent standard deviation. This finding reinforces the concentrated ownership.

Further, managerial ownership (MNG) has a mean percentage of 1.6 which ranges from a low of zero percent to a 21 percent. With a median of 0 percent and a significant positive skewness, it is evident that insider ownership in Kenya is non-existent. Management would be expected to exert their professionalism but will lack the motivating incentive of ownership.

The foreign ownership (FOR) has an average value of 24.7, and ranges from 0 to 72 percent, and a median of 26 per cent. In contrast Abdullah (2009) reports a mean of 8 percent for Malaysian firms. It appears that the foreign component is very much alive in Kenyan firms when compared with other emerging markets.

### 4.3 Correlation Analysis

Pearson correlation coefficients for the primary variables are provided in Table 4.2. There is a positive significant correlation (corr = 0.603, p-value = 0.000) between dividend and earnings. The positive correlations are consistent with the signalling theory, which argues that an increment in dividends will lead to earnings increasing.

Besides that, dividends are also positively, though insignificantly, correlated with CONC (corr = 0.091, p-value = 0.000), and INST (corr = 0.057, p-value 0.145), indicating the possibility of these three variables having predictive power on dividends and the positive relationship as theorized by the literature. Nevertheless, the negative correlation between MNG (corr = -0.120, p-value = 0.003) and dividends contradicts the theoretical literature.

Among the independent variables, there is a positive correlation between earnings and ownership concentration (Corr= 0.182, p-value=0.018). This is probably because highly concentrated companies will lead to a good awareness of the company progress. Besides that, earnings also have a positive correlation with institutional (corr = 0.072, p-value = 0.156) and foreign (corr = 0.068, p-value = 0.134) ownership since profitable companies are an attractive place for investors to invest. However, a negative correlation (-0.061) between managerial ownership and earnings was surprising.

**Table 4.2: Pearson Correlation Matrix among the Variables**

Correlation is a single number that describes the degree of relationship between two variables. The coefficient has a range of possible value from -1.00 to +1.00. The value indicates the strength of the relationship, while the sign (+ or -) indicates the direction. In this study, six interval-level variables are studied and the relationships among all of variables are estimated.

The variables employed in the study are dividends per share (DPS), earnings per share (EPS), concentration in ownership (CONC), institutional ownership (INST), managerial ownership (MNG), and foreign ownership (FOR).

\* Correlation is significant at the 0.05 level

\*\* Correlation is significant at the 0.01 level

	DPS	EPS	CONC	INST	MNG	FOR
EPS	0.603** (0.000)	1				
COC	0.091 (0.163)	0.182* (0.018)	1			
INST	0.057 (0.145)	0.072 (0.156)	0.827** (0.000)	1		
MNG	-0.120 (0.003)	-0.061 (0.146)	0.056	-0.354** (0.000)	1	
FOR	0.297** (004)	0.068 (0.134)	0.196* (0014)	0.115 (0.134)	0.229* (0.023)	1

## 4.4 Regression Analysis

### 4.4.1 Multicollinearity

The regression process commences with the identification of multicollinearity problems. Multicollinearity problems arise when one or more of the explanatory variables are exact or near exact linear combinations of other explanatory variables. Multicollinearity problems could be detected from the correlation matrix for the independent variables. If the variance inflation factor (VIF) value is larger than ten and the tolerance value is below 0.1, multicollinearity problem is said to exist among the independent variables. Tests for multicollinearity showed that the data was robust against its occurrence and there was no need to control for it.

### 4.4.2 Serial Correlation and Heteroscedasticity Test

Subsequently, the models were tested for serial correlation and heteroscedasticity. Serial correlation occurs when a long series of observations are correlated with each other. This

problem emerges when the residuals are not free from one observation to other observation. On the other hand, the purpose of the heteroscedasticity test is to test whether the regression model meets the assumption of homoscedasticity, or in other words, whether there is any unequal variance of the residual between one to the other observation in the regression model. Homoscedasticity refers to the model where the variance of residual from one to the other observation is constant, while heteroscedasticity refers to the situation where the variances of residuals vary. The diagnostic test for serial correlation and heteroscedasticity revealed that treatment for the problem is not required since the p-values indicate that the null hypothesis of no serial correlation and equal variance cannot be rejected.

#### **4.4.3 Regression Analysis**

The F- tests, a measure for the strength of the regression, reveals that each dividend model is significant at 5 percent (p-value = 0.000). Therefore, it can be concluded that ownership classes are vital in determining a dividend policy. In terms of the adjusted  $R^2$ , the explanatory power for partial adjustment model is 90.6 percent whereas, for the Waud model is 26 percent, and for the full adjustment model is only 29 percent.

**Table 4.4: Full adjustment model summary output.**

<i>Regression Statistics</i>	
Multiple R	0.615
R Square	0.379
Adjusted R Square	0.29
Standard Error	0.675
Observations	33

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	7.767	1.942	4.267	0.008
Residual	28	12.740	0.455		
Total	32	20.507			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.069	0.127	0.54	0.59		
(Et i-E( t - 1))*CONC	0.502**	0.229	2.19	0.03	-0.191	0.329
(Et i-E( t - 1))*INST	-0.510	0.234	2.18	0.03	0.033	0.971
(Et i-E( t - 1))*MNG	-2.468	2.558	0.96	0.34	-0.989	-0.031
(Et i-E( t - 1))*FOR	0.274**	0.086	3.17	0.00	-7.707	2.771

\*\* Significant at 0.01 level

**Table 4.5: Partial adjustment model summary output**

<i>Regression Statistics</i>	
Multiple R	0.961
R Square	0.924
Adjusted R Square	0.906
Standard Error	0.245
Observations	33

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	18.943	3.157	52.496	0.000
Residual	26	1.564	0.060		
Total	32	20.507			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-0.056	0.071	-0.791	0.436	-0.201	0.089
Eti	0.067*	0.045	1.480	0.151	-0.026	0.161
Eti*CONC	0.000	0.104	0.004	0.997	-0.214	0.215
Eti*INST	-0.081	0.075	-1.079	0.291	-0.237	0.074
Eti*MNG	-0.078	0.149	-0.526	0.603	-0.385	0.228
Eti*FOR	1.841**	0.119	15.511	0.000	1.597	2.085
D(t-1)i	0.010	0.016	0.632	0.533	-0.023	0.043

\*Significant at 0.05 level

\*\* significant at .01 level

**Table 4.6: Waud model summary output**

<i>Regression Statistics</i>	
Multiple R	0.320
R Square	0.102
Adjusted R sq.	-0.026
Std Error	0.811
Observations	33

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	4	2.099	0.525	0.798	0.537
Residual	28	18.408	0.657		
Total	32	20.507			

	<i>Coeff.</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	1.146	0.731	1.568	0.128	-0.351	2.642
COC	0.382	2.298	0.166	0.869	-4.325	5.089
INST	-2.038	2.226	-0.916	0.368	-6.598	2.522
MNG	-2.044	3.719	-0.550	0.587	-9.663	5.575
FOR	0.394	0.606	0.649	0.521	-0.848	1.635

T- Tests show that the concentrated ownership variable is significant for the Full adjustment model, foreign ownership and change in earnings for the partial adjustment model, while no variable is related to dividends in a significant way in the Waud model.

These findings are consistent with the results presented by Easterbrook (1984) and Nor and Sulong (2009). High dividend payments can be used for mitigating agency conflicts since dividends can be substituted for shareholder monitoring. Therefore, large shareholders have strong incentives to require higher dividend payments in order to reduce monitoring costs.

Further, managerial ownership, and institutional ownership have negative coefficients in all the models, but the critical values are insignificant. The insignificant value for managerial ownership implies that Kenyan companies do not use dividends as a mechanism to reduce the agency costs between managers and shareholders. Nevertheless,



this finding is consistent with the study by Mat Nor and Sulong (2009) and Abdullah (2009).

The three models record a positive relationship between dividend payouts and foreign holdings. Furthermore, the relationship is significant at the 1% level for both the full adjustment and partial adjustment models. Hence, this study fails to reject the agency argument that foreign investors are more active monitors of corporations to reduce agency problems and leading firms to increase the level of payouts.

In summary, the model results show that the last year dividend is vital in determining current dividends, but the direction of relationship contrasts with that suggested by the Lintner's (1956) theory of dividend smoothing which claims that managers adopt a policy of progressiveness in order to stabilize dividend distributions and to avoid erratic rates. Thus, dividends are smoothed and rarely decreased.

#### **4.5 Conclusion**

The empirical results reveal that the partial adjustment model is better in compared to the full adjustment model and the Waud model in explaining the variation in dividends with variables associated with ownership classes. Furthermore, the findings also reveal that only ownership concentration and foreign ownership had significant influence on Kenyan corporate dividend policy. Besides that, this study also reveals that Kenyan dividend behaviour contrasts with the theory of dividend smoothing proposed by Lintner (1956).

## CHAPTER FIVE

### SUMMARY OF RESEARCH FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS.

#### 5.1 Introduction

This chapter winds up the overall study. Section 5.2 discusses the overview of the link between dividends and ownership structure. Then, Section 5.3 presents the summary of the findings in the analysis and Section 5.4 discusses the implications of the study.

Subsequently, the directions for further research are presented in Section 5.5, and Section 5.6 concludes the chapter.

#### 5.2 Overview of the Research Process

This study is done to examine whether ownership structure influences dividend policy among the public-listed companies in Kenya. Therefore, theoretical literature for dividend policy, specifically the Modigliani-Miller theorem and Agency theory has been reviewed. Besides, in-depth empirical literature about the relationship between dividend policy and ownership structure have also been reviewed. Four independent variables used as the proxies of ownership structure were identified, namely ownership concentration, institutional ownership, managerial ownership and foreign ownership. Besides that, the measurement of variables was guided by the prior research.

A total of 33 companies were identified as the sample for the study. These companies were selected based on data availability. Data on dividends, earnings was and ownership variables were hand-collected from sample companies' annual reports. This study employed annual data from 2009 to 2011. This study utilized three dividend models to test the hypothesis of positive links between ownership structure and dividend policy: the Full Adjustment Model, the Partial Adjustment Model and the Waud Model. These models had been modified to account for the possible effects of ownership structure in determining the level of the corporate dividend.

### **5.3 Summary of Findings and Conclusions**

This study was designed to examine the effect of ownership structure on corporate dividend policy; 33 companies were identified as the sample. This sample is representative of NSE companies, since it covered all the market segments. Four predetermined explanatory variables, namely ownership concentration, institutional ownership, managerial ownership and foreign ownership were regressed against dividends.

After a corrective analysis was conducted, and handling for Multicollinearity problems, the regression model of dividend change against all the independent variables revealed that each dividend model was significant at a 5 percent confidence level. However, the Partial Adjustment Model was superior, since it could explain up to 18.0 percent of the variation in dividend compared to 17.4 percent by the Waud model and 12.0 percent by the Full adjustment model.

It was also documented that only one explanatory variable, which is ownership concentration, was statistically significant in influencing corporate dividend policy. Ownership concentration had a positive significant relationship with dividend payment. The positive relationship between ownership concentration and dividends supports the conclusions in Shleifer and Vishny (1986) that large share ownership provides the incentives for controlling shareholders to use their influence to maximize the value of firms by reducing resources consumed in low return projects, thus implying that more cash flows can be distributed as dividends.

Furthermore, the results prove the insignificant relationship of managerial, institutional, and foreign ownership on dividends. Therefore, it implies that these three variables are not vital in explaining dividends; hence dividend decisions in Kenyan companies are not influenced by managerial, institutional, and foreign ownership. Nevertheless, the insignificant value of these three variables in determining dividend distribution has also been found by previous researchers.

Additionally, the study found that  $D(t-1)$  is negative and significant in influencing dividends, which contrasts with the theory of dividends smoothing by Lintner (1956). According to Lintner, managers are reluctant to cut dividend payments because they believe that any cut in dividends may give negative signals about the firm in the market. Thus, dividends are smoothed and rarely declined. In this study, it is observed that the dividend decreasing trend, instead of dividend increasing trend, over time is taking place.

The research has examined the relationship between dividend policy and ownership composition among the public-listed companies in Kenya. The positive significance of ownership concentration variables implies that the formation of ownership has an effect on the amount of dividends distribution. Besides that, the regression model of dividends against all the independent variables was also found to be significant. Nevertheless, the findings reveal that the model of research explains less than 20 percent variation of dividend phenomenon in Kenya. Thus, it indicates the possibility that dividend policy of Kenyan companies can also be explained by other dividend theory such as signalling theory and life-cycle theory.

This study further concludes that shareholders should concern themselves with the agency conflict between ownership classes. Shareholders must realize that financial policies such as dividend policy can serve as a mechanism for reducing agency costs. Besides that, regulatory bodies should also be concerned with the formation of ownership in formulating the related regulations to better control the agency conflict.

Moreover, the findings also reveal that the Partial adjustment model is better in explaining the variation of corporate dividend policy compared to the Waud model and the Full adjustment model.

### **5.5 Direction for Further Studies**

There are a rich possible number of variables that can be used to examine the determinants of dividend policy. Nevertheless, this research concentrates on the ownership structure among the companies listed NSE and focuses on the four major

variables that were repeatedly used by prior researchers. However, there might be other ownership variables that can be incorporated to explain the link between dividends and ownership composition. Thus, it would be beneficial if further research would be able to include other variables such as government ownership, board of directors' ownership, family ownership and many other types of ownership classes. This can help to better understand Kenyan companies' dividend decisions.

Moreover, the lower explanatory power of the model examined in this study suggest the need of future research to focus on other dividend theories such as signalling theory, residual theory, life-cycle theory, smoothing theory and catering theory in the pursuit to understand the influence of factors on dividend policy in Kenya.

Furthermore, future research also can use Tobit regression to get better results since some of dependent variable is zeros. Future researchers on this topic may also use survey and interview methods to gauge top management and investor perspectives on this issue. In addition, future research may also increase the observation by incorporating companies listed in other sectors that are not included in this study. Besides that, the longer period of study may also enhance the predictability model of the research. The findings will provide an interesting comparison to the findings from this study.

## **5.6 Limitations of the Study**

The generality of the findings of the study are to be taken with caution because of several limitations.

First the period covered was limited to only three years. A longer coverage period may result in more conclusive findings.

Secondly, the study confined itself to only a few of the many relevant ownership variables. A comprehensive study should attempt at widening the number of variables covered.

Thirdly, In addition to Lintner's theories on dividend, other competing theories have sprung into existence. Such theories include the catering theory, asymmetric information theory, the life cycle theory among others. This study should be seen in the context of only one alternative explanation. It is thus limited to the theorizing of Lintner.

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## APPENDIX 1

### The Sampled firms included in the survey

#### AGRICULTURAL

1. Unilever Tea Kenya Ltd
2. Kakuzi Company
3. Rea Vipingo Plantations Ltd
4. Sasini Ltd

#### COMMERCIAL AND SERVICES

5. Car & General (K) Ltd
6. CMC Holdings Ltd
7. Kenya Airways Ltd
8. Marshalls (E.A) Ltd
9. Nation Media Group
10. Sameer Africa
11. Standard Group Ltd
12. TPSEA Serena
13. Uchumi Supermarket

#### INDUSTRIAL AND ALLIED

14. Athi River Mining
15. BOC Kenya Ltd
13. Bamburi Cement Ltd
14. British American Tobacco Kenya Ltd
15. E.A Cables Ltd
16. E.A Portland Cement Ltd
17. East African Breweries Ltd
18. Crown Paints Kenya Ltd
18. Kenya Power and Lighting Ltd
19. Kenya Oil Co Ltd
20. Olympia Capital Holdings Ltd
21. Total Kenya Ltd
22. Unga Group Ltd
23. BAT Kenya Ltd

#### ALTERNATIVE INVESTMENT MARKET SEGMENT

- 27A. Baumann & Co. Ltd
28. Eaagads Ltd
29. Express Ltd
30. Williamson Tea Kenya Ltd
31. Kapchorua Tea Co. Ltd

- 32. Kenya Orchards Ltd
- 33. Limuru Tea Co. Ltd