# THE DETERMINANTS OF DIVIDEND SMOOTHING AMONG LISTED COMPANIES AT THE NAIROBI SECURITIES EXCHANGE

BY

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# DECLARATION

This management Research project is my original work and has not been presented for the award of a degree in any University.

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This Management Research paper has been submitted for the examination with my approval as University supervisor.

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# DEDICATION

I dedicate this project to the Almighty God for this far he has taken me towards the achievement of this goal. To my parents, brothers, sisters and my wife for the sacrifice they made for my education to become what I am today.

# ABSTRACT

Dividend smoothing is when you keep your dividends relative to your Earnings per share. Not too high dividends and not too low. It may also imply setting a dividend price that does not necessarily conform to retained earnings. The dividend smoothing decision can affect the value of the firm by changing the firm's expected earnings in the preceding years, its cost of capital or both. One of the most important objectives of determining factors leading to dividend smoothing of the firm is to ensure that we maximize shareholders wealth while we protect the value of the firm in terms of retained earnings. This project was on the determinants of dividend smoothing in the Kenyan firms with special reference to those listed in the NSE. This study sought to establish the determinants of dividend smoothing of the listed companies in Kenya. The study focused on the firms that have been paying out dividends in the last five years. Expectedly, the results of the study were sufficient to give an insight into the determinants of dividend smoothing among the listed companies in Kenva, which were: size of the firm, firms earning and profitability, firms agency conflict, ownership structure, taxes, information asymmetry and growth stage of the firm. The study employed univariate analysis and multiple regressions to measure the impact of the different factors on the company's dividend payout. The data that was used was for the last five years that is; from 2008 to 2012 since the more recent the data the more it is likely to give the true representation in the industry.

# LIST OF ABBREVIATIONS

EBIT	Earnings before Interest and Taxes
FISD	Financial Information Services Division
KNBS	Kenya National Bureau of Statistics
MM	Modigliani and Miller
NSE	Nairobi Securities Exchange
SPSS	Statistical Package for Social Science
NPV	Net Present Value
ROE	Return on Equity
CAPM	Capital Asset Pricing Model

# **OPERATIONAL DEFINITION OF TERMS**

**Dividend smoothing** it is setting a dividend price that does not necessarily conform to retained earnings.

Leverage This is the ratio of debt financing to the total capital for a firm in its capital structure.

**Equity Financing** The act of raising money for a firm by selling common or preferred stock to individual or institutional investors. In return for the money paid, shareholders receive ownership interests in the corporation.

**Financial performance** this is the measure of how well a firm can use assets both current and long term to generate revenues. It is also used as a general measure of a firm's overall financial wellness over a given period of time, and can be used to compare similar firms across the same industry.

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### **CHAPTER ONE: INTRODUCTION**

#### **1.1 Background of the Study**

Though governments focus on the economy as a whole, no economy can grow if the micro units, in this case firms are not managed efficiently. Efficient management requires quality decisions. In finance quality financial decision is central to financial management. Financial decisions are discussed under the headings, investment, financing and asset management.

The focus in this study was on an unresolved issue, namely the dividend decision. Company dividend decisions involve a wide range of policy issues at both the macro and micro levels. At the macro level, dividend decisions affect capital market development, interest rate, security price determination, and regulation, while at the micro level, it affect capital structure, corporate governance and company development (Green et al., 2002). From valuation perspective it is presumed that investors buy future dividends when they buy a new share.

Dividend decision is contentious due to lack of agreement as to whether it impacts on the value of the firm or not. Contemporary finance theory and practice is constructed on the idea of absence of arbitrage as the unifying concept of valuation. Absence of arbitrage implies the existence and rule of one price in capital and financial markets imply that identical assets have identical values. Furthermore the law of one price states that we can use market prices to determine the value of investment opportunity for investors at firm and individual level (Berk and DeMarzo, 2011:50). Financial decisions are only relevant if they impact on the value of the firm. An important financial decision is the amount of earnings to distribute to shareholders as dividends. The distribution is in cognizance of

the conviction that firms exist to maximizing shareholder wealth. The argument behind dividend policy is that when firms generate excess cash, managers and directors must decide how to use the free cash. The excess cash can be invested into worthwhile projects as is prevalent in young and rapidly growing firms or can be distributed as dividends as in the case of mature profitable firms. In the background is the idea developed by Modigliani and Miller (1961) stating that in perfect capital market, the firm's choice of dividend policy is irrelevant and does not affect the value of the firm. Even the irrelevance theorem, it is emerging that dividend policy is shaped by market imperfections, such as taxes, agency costs, transactions costs, and asymmetric information between managers and investors (Berk and DeMarzo, 2011:551). From agency theory perspective, dividend payout is one of the effective management tools to manage the relationship between the management and the owners of the firm (shareholders).

The various studies done on dividend smoothing have not yet resolved the puzzle of the primary determinants of dividend smoothing decisions by firms especially on the Kenyan firms. Various theories and empirical studies reviewed have further revealed the contradicting views of researchers on the subject of dividend smoothing. On determinants of dividend smoothing, no studies have been done in Kenya and specifically on the relationship between profitability, agency conflicts, size of the firm, earnings, ownership structure and dividend smoothing.

This study has addressed the knowledge gap on the relationship between; taxes, information asymmetry, size, agency conflicts, earnings and profitability, growth stage, ownership structure and dividend smoothing of companies listed in the NSE.

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#### **1.1.1** The context of the study

The study mainly focused on how firms listed in the NSE smooth their dividends with special interest on the determinants of dividend smoothing by the firms. I used a sample size of all firms that are listed and that have been paying dividends for the last five years. The study targeted both the private and public companies listed in Nairobi Securities Exchange.

#### **1.1.2 Determinants of Dividend Smoothing**

As early as 1956, Lintner (1956) observed that firms prefer stable dividends. Dividend smoothing is the practice of maintaining relatively constant dividends. It implies that firms change dividends infrequently and dividends are much less volatile than earnings (Ellili & Farouk, 2011).

An aspect of dividend policy is dividend smoothing. Therefore it is necessary to examine the factors that influence managers to smooth dividend which includes: taxes, firms' earnings and profitability, agency conflicts, information asymmetry, size of the company, ownership structure and the company's life stage. (Damodaran, 2001; Bender & Ward, 1993).

Under asymmetric information, dividends are used as a signal to convey information about future profitability (Bhattacharya (1979), Miller and Rock (1985), John and Williams (1985), and Bernheim and Wantz (1995)). In contrast, agency theories suggest that dividends are a means to mitigate perquisite consumption, empire building, or other value-destroying activities (Jensen and Meckling (1976), Easterbrook (1984), Jensen (1986), La Porta et al. (2000)). The level of institutional holdings has been used as a proxy for taxes. Since many institutions are not tax exempt, the level of institutional holdings has been used as a proxy for investors' tax clientele (Hotchkiss and Lawrence 2007; Ferreira, Massa, and Matos 2009).

On the other hand a factor such as ownership structure, some researchers concluded that dividend smoothing is costly to firms. This happens when managers are willing to raise external capital or even forego positive NPV investments to avoid cutting dividends (Brav, Graham, Harvey, and Michaely, 2005).

It is further documented that dividend smoothing is determined in part by the time-series properties of a firm's earnings and profitability. Consistent with the survey evidence of Lintner (1956), firms with more persistent earnings series smooth less, while those with more cyclical earnings smooth more.

It has been found that young and small firms with low dividend yields but with high earnings volatility and high return volatility smooth less. These findings suggest that firms facing greater uncertainty and more information asymmetry smooth less, which is inconsistent with the implications of several of the existing asymmetric information models. At the same time, our results indicate that firms that are cash cows, firms with low growth prospects, and firms that are monitored by institutional investors smooth more. This is consistent with several of the implications of the agency theories.

#### **1.1.3 The Nairobi Securities Exchange**

The Nairobi Securities Exchange (NSE) is the principal securities exchange in Kenya. It was set up in 1954 as an overseas stock exchange while Kenya was still a British Colony

with the permission of the London Stock Exchange. In the recent past, the stock exchange has undergone major changes and transformations and the level of activity has tremendously increased. A lot of interest in the stock exchange was generated in the 1980s when the government embarked on privatization program targeting state corporations.

In 2006, Nairobi Securities Exchange implemented live trading on the automated trading system (ATS) which was customized to uphold the spirit of the Open Outcry Trading Rules in an automated environment. In the same breadth, trading hours increased from two (10.00am – 12.00pm) to three hours (10.00am – 1.00pm).

In July 2007, Nairobi Securities Exchange reviewed the index and announced the companies that would constitute the NSE Share Index. A Wide Area Network (WAN) platform was also implemented in 2007 and this eradicated the need for brokers to send their staff (dealers) to the trading floor to conduct business. In 2008, the NSE All Share Index (NASI) was introduced as an alternative index. Its measure is an overall indicator of market performance. The index incorporates all the traded shares of the day. In July 2011, the Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited. The change of name reflected the strategic plan of the Nairobi Securities trading, clearing and settlement of equities, debt, derivatives and other associated instruments (**www.nse.co.ke**).

## **1.2 Research Problem**

Dividend policies refer to a firm's policy regarding disbursing out cash to its shareholders holding constant its investment and borrowing decisions. In a perfect capital market the value of the firm is unchanged no matter what dividend policy the firm adopts. However, in the real world frictions exist, and such frictions can cause dividend policy to have effect on the value of the firm (Bodie, Merton and Cleeton, 2009:253).

Despite the prevalence and importance of dividend smoothing; there is little agreement about why firms smooth their dividends or what determines a firm's propensity to smooth. The determination of an optimal dividend payout and dividend smoothing as well as the factors that determine it have been and, is still an important area in financial management. This is evident in a comment by Leary and Michaely (2011) 'Rather than set dividends de novo each quarter, firms first consider whether they need to make any changes from the existing rate. Only when they have decided a change is necessary do they consider how large it should be. Managers appear to believe strongly that the market puts a premium on firms with a stable dividend policy.' However, some researchers conclude that dividend smoothing is costly to firms. Yet other researchers observe that there is no clear reason why firms smooth their dividends, nor convincing evidence that investors prefer this practice (Berk and Demarzo, 2007:556; Baker and Wurgler, 2010), and lack in agreement on factors that influence managers decision to smooth dividends (Lambrecht and Myers, 2010).

This study mainly focused on the primary factors that make firms that are listed in the Nairobi Securities Exchange (NSE) smooth their dividends. The researcher used a sample

size of all firms which have been paying dividend to their shareholders for the last five years and are listed in the NSE. The study targeted the large and small firms, old and new firms and highly profitable and low profit making firms in order to get the probable answers to the research question.

This research therefore intends to concentrate on identifying the determinants of the dividend smoothing decisions of companies listed at the NSE. Although several studies have been done on the dividend decisions of the companies none has been done on determinants of dividend smoothing firms listed at the NSE goals. Mutswenje (2006) in a multi correlation analysis of dividend paid against other factors (twenty seven in total) such as need of the investors, share price of the firm and broker information; cite a varied response to different situation. As such seems to make a conclusion that given different conditions the dividend decision will definitely change.

Research carried out by Karanja (1984) and Ndung'u (2009) document that determinants of dividend policy has constantly grown from liquidity position of the firm to expected future profits, cash flow position, and profitable investments. These determinants are both internal and external. Studies by Asuke (2009) and Odhiambo (2006) were also set to find out the determinants of dividend payment policies by the twenty financial – sector listed companies at the NSE

Given that similar studies are in developed economy, NSE is ideal because the frictions in this market vary compared to European and American capital markets. Mwaura and Waweru (2012) investigated the signaling hypothesis by testing the displacement

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property of dividends. The study's findings provided further empirical evidence that dividends are used as signals about future earnings prospects of the firm.

The researcher has explored the time trends in smoothing behavior over a longer horizon than has previously been documented in Kenya. Expectedly, the findings will serve both to shed light on existing theories of smoothing as well as to provide direction for future theoretical work.

The issue of determinants of dividend smoothing has not been given enough attention by researchers especially in Africa and in particular Kenya. In fact none has ever been done concerning this topic. There's a very big disparities between time periods during which the research were carried out. It was therefore important to carry out this study to understand the determinants of dividend smoothening in the firms listed in the NSE and those that has been paying dividends for the past five years.

This study was therefore seeking an answer to the questions: What factors influence dividend smoothing at NSE?

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

This study sought to establish the factors that influence dividend smoothing among the companies listed at Nairobi Securities Exchange.

# 1.4 Value of the study

The study benefits shareholders and other stakeholders of listed companies by giving an insight into the dividend smoothing techniques and the main factors the companies consider in determining the same.

Potential investors will also find the study useful. Individual investors (both small scale and large scale) who have different investment needs will be able to make more informed investment decisions. Institutional investors whose needs are different from individual investors will also find the study useful.

The study has contributed to the existing body of knowledge and forms the basis for further studies. The entire research was conducted in Nairobi since it's the most convenient place to get the required information.

#### **CHAPTER TWO: LITERATURE REVIEW**

## **2.1 Introduction**

This chapter explores various studies carried out on dividend smoothing to establish the relationship between the various expected factors affecting dividend smoothing decisions and the dividend smoothing of the companies registered in Kenya and listed in the NSE. In this chapter we introduce the theories on dividend smoothing and later in the chapter we review the key determinants of dividend smoothing.

### 2.2 Theoretical Review on Dividend Smoothing

The determination of dividend smoothing has been one of the most controversial topics in finance and several theories have been put forth on this subject. Existing models of dividend smoothing can be divided into those that are primarily based on asymmetric information and those that are motivated by agency considerations. On the whole, theories motivated by asymmetric information generally predict that increases in information asymmetry and risk will increase smoothing (Kumar (1988), Guttman et. al. (2007)). The presence of institutional investors may lead to both more information production and better monitoring (Allen et al, 2000), while models motivated by agency conflicts predict that as the extent of conflict of interest between managers and outside shareholders increases, the use of smoothing will increase to reduce those conflicts. Allen et al. (2000) use an agency-based argument to predict that smoothing will increase with institutional ownership, while in Brennan and Thakor (1990) information asymmetry leads to more smoothing with lower institutional holdings. These theories that have been put forth to explain dividend smoothing and are discussed at length as follows:

# **2.2.1 Information Asymmetry or Signaling Theory**

Another assumption of Modigliani and Miller's value invariance theory was that the market possesses full information about the activities of firms. Models referring to the signaling theories assume the existence of imperfect and asymmetric information between the various partners of the company. The conflicts of interests are likely to appear between the quite informed managers and the other uninformed partners. To solve this problem, the managers try to communicate their information to the other partners by a signal. There are multiple signals used in finance and allow the investors to make a perfect difference between various companies. This invariance theory assumption of perfect information was relaxed by Leland and Pyle (1976) and Stephen Ross through the information asymmetry theory (Ross 1977).

Asymmetric information models, Kumar (1988), Kumar and Lee (2001) and Guttman, Kadan, and Kandel(2007) offer models in which the dividend serves as a signal of managers' private information about current or future cash flows.

Asymmetric information generally predict that increases in information asymmetry and risk will increase smoothing (e.g., Kumar (1988), Guttman et. al. (2007)), for example, the level of dividends is part of the Prudent-man rules, suggesting that stocks that pay higher level of dividends are more likely to be held by institutional investors (Brav and Heaton, 1998). The presence of institutional investors may lead to both more information production and better monitoring (Allen et al, 2000)

However, Fama and French (1988) were of a different opinion that more profitable firms tend to have lower levels of dividend payout. They argued that increasing dividends actually signals poor prospects for future earnings and cash flow as there will be less internal financing available to fund development. Baeyens and Manigaart (2003) argue that information asymmetries decrease over the lifetime of a firm. However, there is insufficient clarity on exactly how signaling, within the context of information asymmetries, affects dividend smoothening decisions.

#### **2.2.2 Pecking Order Theory**

This theory is based on the asymmetric information between managers and investors. Managers know more about the true value of the company and the company's riskiness than less informed outside investors which affects the choice between internal and external financing Myers (1984). To avoid the problem of under-investment, the managers seek to finance the new project using a security that is not undervalued by the market, such as internal funds including retained earnings or riskless debt and therefore would reduce the amount payable as dividends in order to finance such projects. The pecking order theory is able to explain why companies tend to depend on internal sources of funds. According to this theory and if the external funds are needed, the companies prefer the issue of debts to that of stocks because of the low information costs associated with such issue.

Myers found that firms tend to follow a 'pecking order' in financing their projects. First they use internal equity, then debt, and only then do they use external equity (Myers, 1984). Ross (1977) earlier argued that firms use more debt to overcome information

asymmetries and signal better prospects. Myers (2001) however used information asymmetries to argue that managers are unlikely to issue equity because they fear it will signal that the stock price is overvalued. Allen (1993) and Fama and French (1988) like Myers also found that leverage is inversely related to profitability, which supports the pecking order theory view that debt is only issued when there is insufficient retained income to finance investment.

#### **2.2.3 Agency Conflict Theory**

Jensen and Meckling (1976) are the pioneers in introducing the agency theory and in relaxing the assumption of no conflict of interest between the managers and the shareholders. Their financial model is focused mainly on the relationship between the shareholders as the principal and the manager as the agent. Managers do not always act in the interest of the shareholders and consequently the goal is not always to maximize the value of the company and therefore a conflict of interest arises. Such a conflict of interest will create agency costs that require remedy measures. The managers tend to prove the quality of their decisions in a way to put the shareholder in confidence and minimizing the residual loss corresponding to the divergence of interests between the manager and the shareholders. According to Jensen and Meckling (1976), the managers can use the financial policy to get pecuniary and non-pecuniary benefits like prestige, discretionary latitude and empire building. The constraint of dividend payout is not always neutral but it influences the managerial behavior in terms of investment.

Easterbrook (1984) and Jensen (1986) suggest that paying a dividend that is both high and smooth forces firms to raise external capital to meet any financing needs. This continual exposure to the discipline of external financial markets reduces agency costs. DeAngelo and DeAngelo (2007) model the trade-off between agency costs of free cash and adverse selection costs of security issuance. Low leverage preserves financial flexibility, but exposes firms to the agency costs of excess cash. A high and stable dividend enables mature firms to mitigate agency costs without sacrificing (and perhaps enhancing) access to low-cost external capital. The authors conclude that "the ideal financial policy for mature firms is low leverage combined with substantial, ongoing equity payouts." This predicts a very different profile of dividend smoothers from the financial constraints explanation, in which dividend smoothing is associated with low dividend levels and high-cost capital market access.

Finally Lambrecht and Myers (2010) argue that shareholders demand a regular dividend to limit agency costs, but costs of collective action allow the manager to extract rents. Risk aversion and habit formation in the manager's utility function lead him to desire a smooth stream of rents, which in turn requires a smooth stream of dividends. While the level of dividends increases as shareholder rights weaken, the degree of smoothing is primarily a function of the manager's habit persistence.

#### 2.3 Determinants of Dividend Smoothing

There are different factors that determine dividend smoothing and that may affect the dividend payout choice. According to Kumar (1988), Guttman et. al. (2007)), firm size, firm age, asset tangibility and the profitability could be used to proxy for the degree of information asymmetry and its relationship with dividend smoothing decisions by firms. Among the factors, the most common cited are, profitability, size, expected growth,

operating risk, agency conflicts, managerial ownership, and the earnings of the company. This study looks at the following factors: profitability of the firm, size of the firm, earnings of the firm, the ownership structure and the agency conflict between the shareholders and the management. The research therefore will look at the literature surrounding these selected expected determinants of dividend smoothing decisions.

## 2.3.1 Size of the Firm

There is still no consensus among researchers on the impact of the company's size on the dividend smoothing decisions. It is also still not clear if such a relationship exists, and if it does, the nature of the relationship whether inverse or positive. We however see that Titman and Wessels (1988) confirm that there is a positive relationship between the size of a firm and its dividend smoothing. They argue that the larger companies are likely to smooth dividends since they have lower variance of their earnings, making them able to tolerate dividend payout ratios.

However, according to the pecking order theory, there is a negative relationship between the size of a firm and the dividend payout. The reason for this is that larger companies are more closely observed and they should be more able to issue equity. Rajan and Zingales, (1995) support this argument that the larger companies should have lower debt because of less asymmetric information.

# 2.3.2 Firm Earnings and Profitability

Dividend smoothing is determined in part by the time-series properties of a firm's earnings. Consistent with the survey evidence of Lintner (1956), firms with more persistent earnings series smooth less, while those with more cyclical earnings smooth

more. It has also been found that firms that smooth their earnings more smooth dividends less. At the same time, our cross-sectional results reflect differences in dividend policy over and above any differences in earnings smoothing behavior. It is also documented that there is a pronounced asymmetry in smoothing behavior: Firms adjust dividends quicker when they are below their target than when they are above.

The financial literature provides conflicting evidence on the relationship between the profitability and the capital structure of the company. Myers and Majluf, (1984) argue that the companies have a pecking order in the choice of financing their activities and the relationship between leverage and profitability is negative since the internal funds are more preferred than debt. There is therefore a negative relationship between the company's profitability and the level of its debts. It is however generally expected that more profitable companies are more able in tolerating high level of debt since they may be in a good position to meet their obligations easily and on time. They therefore can easily add more debt in their capital structure (Peterson and Rajan, 1994).

Ellili and Farouk, (2011) in their empirical analysis of companies traded on Abu Dhabi Stock Exchange found out that profitability is negatively correlated to the long term leverage and positively correlated to the short term leverage. This result reveals that the profitable companies use their internal funds in financing their long term investments and use the short term debt in financing their operating activities.

# 2.3.3 Firm Agency Conflicts

On the other hand, the evidence is more consistent with agency conflicts as the market friction that motivates smoothing. For example, Easterbrook(1984), Allen, Bernardo, and Welch (2000), and DeAngelo and DeAngelo(2007) all predict a positive relationship between smoothing and the level of dividends, and between smoothing and the severity of the free cash flow problem. Overall, the results suggest that this class of agency-based models offers the most promise for future development.

Turning to agency cost proxies, highly profitable firms with low market to-book ratios are likely to have excess cash relative to profitable investment opportunities (Jensen 1986; Fama and French 2002). Likewise, firms that are cash cows (firms that are profitable, have high credit ratings, and have low P/E ratios) are likely to be more sensitive to agency problems (Brav et al. 2005). Further, include a measure of governance strength (the Gompers, Ishii, and Metrick 2003 index) to capture exposure to principal-agent conflicts (Officer2010; John and Knyazeva 2008

# 2.3.4 Ownership Structure

Dividend smoothing can also arise from an effort to avoid costly external finance, as in Almeida, Campello, and Weisbach (2004). However, smoothing is said to be most prevalent among firms that appear to have the least constrained access to external capital and highest dividend levels. Tax-based models, which imply that firms held largely by individual investors will tend to smooth more, also receive little support.

Harris and Raviv (1988) affirm that the managers increase the debt ratio in order to reinforce their control. Managers try to change the capital structure of the companies to control a large fraction of voting rights. Zingales et al (1995) and Zwiebel (1996) argue that threat of takeover forces the managers to issue debts and to prove their alignment. By the issue of bonds, the managers avoid investing in projects with a negative net present value in order to decrease the bankruptcy risk. Amihud and Lev (1981) affirm that the managers having a non-diversifiable human capital are more interested in minimizing their risk of employment through the viability of the companies by reducing the debts. Also, Berger, Ofeck and Yermack (1997) find that the entrenched managers avoid debt.

Amihud and Lev, (1981) argue that managerial insiders have a somewhat different perspective since many of them have large portions of their personal wealth invested in the firm. The same view was shared by Friend and Hasbrouck, (1988). The wealth that managerial insiders have invested in their employer is composed largely of their employer's common stock and the human capital they have accumulated while working for the firm. Since these items tend to represent a large proportion of an insider's total wealth, the bankruptcy of the employer would have a major impact on their personal wealth. According to Friend and Hasbrouck (1988), the more wealth a managerial insider has invested in the employer, the greater the incentive they have to minimize the use of debt financing.

Noe and Rebello (1996) argue that the locus of control within a firm is an important determinant of choice of finance. When corporate decisions are dictated by the manager,

equity issues will be favored over debt because of the managers' inclination to protect their undiversified human capital and to avoid the performance pressure associated with debt commitments (Berger et al., 1997). However, Abor (2008) argue that the locus of control rests with substantial shareholders that are not represented on the management board, especially of quoted firms. He further argues that the company may take on more debt to limit the scope for managerial discretion and notes that previous empirical studies suggest that managerial ownership should be negatively related to use of debt.

#### 2.3.5 Taxes

Various studies carried out suggest that there are significant variations in agency relationships and tax systems. Shleifer and Vishny (1997) point out that adoption of full or partial imputation system in which shareholders can receive tax benefits at least a part for corporate tax payments on distributed income. These facts naturally raise a prediction that the degree of dividend smoothing significantly varies across firms with different ownership structures and tax obligations. Dewenter and Warther (1998) found that some firms are less reluctant to cut or omit dividends than other firms and that this behaviour has a direct relationship with dividend smoothing. Andres, Betzer, Goergen, and Renneboog (2009) argued that German firms adopt more flexible dividend smoothing policy than US firms due to its favourable tax regime. In a similar vein, Chemmanur, He, Hu, and Liu (2010) suggest that Hong Kong firms, which have concentrated ownership structures and do not present adverse tax effects on dividends, adjust dividend levels more quickly to the long-term target than US.

# **2.3.6 Information Asymmetry**

The limited information available on dividend smoothing is surprising especially when compared to our knowledge, both theoretical and empirical, of what determines the level of dividends (see Allen and Michaely (2003) and Kalay and Lemmon (2008) for comprehensive reviews of this literature). Theories of dividend smoothing are primarily based on either asymmetric information (Kumar (1988), Brennan and Thakor (1990), Guttman, Kadan, and Kandel (2007))

Generally speaking, the implications of the asymmetric information models are that firms facing more uncertainty and greater information asymmetry will tend to smooth more. For example, Kumar (1988) and Guttman et al. (2007) show that dividend smoothing can arise from a coarse signaling equilibrium in a setting where managers have private information about firm value. The agency models' implications are that firms that face greater potential for conflicts of interest between shareholders and managers – those with slower growth, excess cash or weaker monitoring–will smooth more. For example, Allen et al. (2000) propose that a greater concentration of institutional investors (who exert better monitoring than individual investors) will result in more smoothing.

# 2.3.7 Growth stage of a firm

Ellili and Farouk (2011) found out that the expected growth of the company has a positive impact on the long term leverage and a negative impact on the short term leverage. Their results confirm that the companies do prefer financing their growth by the long term debt rather than the short term debt. This suggests that small firms that have prospects to grow further smooth more their dividends compared to large and well established firms.

However, previous empirical results on the relationship between the expected growth and the dividend smoothing were ambiguous. According to the pecking order theory, the relationship between the growth and the leverage is positive since higher growth opportunities imply a higher demand of fund through the preferred source of debt.

#### **2.4 Empirical Review**

Lintner (1956) in his research developed a model of dividend policy in which he proposed that firms adjust their dividends slowly to maintain a target long-run payout ratio. Lintner interviewed managers from 28 companies and found that rather than setting dividends each year independently based on that year's earnings, they first decide whether to change dividends from the previous year's level. Managers claimed to reduce dividends only when they had no other choice, and increase dividends only if they were confident that future cash cows could sustain the new dividend level. Two beliefs were expressed strongly: that investors put a premium on companies with stable dividends, and that markets penalize firms that cut dividends. Furthermore, Lintner found that managers were setting the dividend policy first, while adjusting other cash-related decisions to the chosen dividend level. Almost fifty years later, in a survey of 384 financial executives, Brav, Graham, Harvey and Michaely (2005) found that similar considerations still play a dominant role in determining dividends in publicly traded firms. By contrast, Michaely and Roberts (2007) found that dividend smoothing is significantly less likely in private firms.

Michaely and Roberts (2006) carried a research on Dividend Smoothing, Agency Costs, and Information Asymmetry: Lessons from the Dividend Policies of Private Firms. The results showed that the protection of governance mechanisms afforded to shareholders of publicly traded companies results in dividend policies that distribute a relatively large fraction of earnings, and dividends that are more sensitive to variations in investment opportunities relative to otherwise similar private firms for which these mechanism are unavailable to mitigate agency conflicts.

Leary and Michaely (2009) carried out a research on the reason why firms in the United States of America smooth dividends. The study revealed that larger firms, firms with more tangible assets, and firms with lower price volatility and earnings volatility smooth more. The findings also indicated that firms with slower growth prospects and firms that are "cash cows" smooth more. Firms with a more significant presence of institutional investors and firms with higher payout ratios also smoothed more.

Oman (2011) offered a valuable opportunity to investigate the stability of the dividend policy. In Oman, (1) there are no taxes on dividends, (2) firms are highly levered mainly through bank loans, (3) there is a high concentration of stock ownership and (4) there is variability in cash dividend payments. These factors suggested a diminished role of dividend smoothing in Oman. The results showed that financial firms have erratic dividend policies. His results were inconsistent with the predictions suggested by the relatively weak corporate governance, government ownership and dividend signaling.

The various studies done on dividend smoothing have not yet resolved the puzzle of the primary determinants of dividend smoothing decisions by firms especially on the Kenyan firms. Various theories and empirical studies reviewed in this chapter have further revealed the contradicting views of researchers on the subject of dividend smoothing. On determinants of dividend smoothing, no studies have been done in Kenya and specifically

on the relationship between profitability, agency conflicts, size of firms, earnings, ownership structure and dividend smoothing.

This study addresses the knowledge gap on the relationship between; taxes, information asymmetry, size, agency conflicts, earnings and profitability, growth stage, ownership structure and dividend smoothing of companies listed in the NSE.

#### CHAPTER THREE: RESEARCH METHODOLOGY

# **3.0 Introduction**

This chapter explores the methodology used in this study clearly explaining the research design employed, the population of interest, data collection and data analysis. It also explains sources of data, methods of data collection employed, and the techniques that were used to analyze data. It also explains the model used. The study was conducted on the listed companies in the Nairobi Securities Exchange that pay dividends to the shareholders from the NSE database in Nairobi.

# **3.1 Research Design**

This was a descriptive study of the factors determining dividend smoothing by companies listed in Nairobi Securities Exchange, Kenya. The study therefore employed a casual design. The study employed cross-sectional research design to gather the data. This design was chosen because it offers the most reliable set of data. Cross-sectional research involves observation of a representative subset at a defined time. The study was a quantitative study and the data collection covered the last five financial years (2008-2012)

The goal of the research design was to describe relevant aspects of the dividend payout from an individual organizational, industry oriented or other perspective. Such information may be vital before even considering certain corrective steps in the whole process. (Blurtit.com, 2012).

#### **3.2 Population of Study**

Cooper and Schindler, (2000) described a population as the total collection of elements about which the researcher wishes to make inference. The study included all listed firms that have been paying dividends for the last 5 years and that are currently listed in the Nairobi securities Exchange.

#### 3.3 Sample design

The sample was deduced through a census of the firms that are listed in the NSE and have paid dividends for the last 5 years. The NSE staffs with knowledge of data required were consulted and the secondary data obtained.

## **3.4 Data Collection Methods**

The study used secondary data from NSE data base. The data was collected through request for the relevant information from the NSE and the firms under the study themselves. The data collection was divided into four parts; the premier- had questions on the general information about the case company. The second part researched on the company in relation to the dividend payout, the third on the ownership structure, growth of the company and profitability and earnings of the company and the fourth on the size of the company and agency conflicts in relation to the dividend smoothing.

#### **3.5 Data Analysis**

This study employed multiple regression analysis to measure the effect of the different factors on the company's dividend smoothing decision to analyze the relationship

between the dependent and the independent variables; the following regression equation was used:

$$Y = + 1X1 + 2X2 + 3X3 + 4X4 + 5X5 + 6D + E$$

Where;

Y is the dividend smoothing computed using Linters model to estimate the Speed of adjustment (SOA);  $D_{it} = g + h (D^{^{*}}_{it} - D_{it-1}) + X_{it}$ ,

, 1- 6 are coefficients to be extracted of X.

X1= size of the firm measured as the natural logarithm of total assets

X2 = earnings of the firm measured as the amount of sales growth in revenue annually

X3 = profitability measured by the returns on assets

X4 = growth rate measured by the percentage change in total assets

X5 = ownership structure measured by number of directors

D = dummy variable 1 when listed firm and zero otherwise

E = the random error term

Lintner (1956) originally presented the following partial-adjustment model of dividend payments:

 $D_{it}-D_{it-1} = + (D_{it}^*-D_{it-1})+U_{it}$ 

Where D is the actual dividend payment, and  $D^*$  is the target dividend level which is computed by the net income times the target payout ratio. represents the Speed of Adjustment (SOA). Since the target payout ratio is unknown to researchers, many previous studies including Lintner (1956) estimate by using the following equations(equation(1) by Chemmanur, He, Hu, and Liu, 2010; equation(2) by Lintner, 1956; Chemmanur, He, Hu, and Liu, 2010; Aivazian, Booth, and Cleary, 2006):

$$D_{it} = + bE_{it} + cD_{it-1} + V_{it}$$
 (1).

$$D_{it} = d_i + e_i E_i + f D_{it-1} + W_{it}$$
 (2).

Under the equation (1), the SOA is estimated as c while it is 1-f under the equation (2). Although models (1) and (2) are commonly used in previous studies, Leary and Michaely (2011) point out that these models suffer from the small-sample bias in AR (1) models. Alternatively, they propose the following model to estimate the SOA:

$$D_{it} = g + h \left( D^{**}_{it} - D_{it-1} \right) + X_{it}$$
(3)

Where  $D_{it}^{*}$  is computed as the median payout ratio of the firm during the period. Although estimation of equation (3) can successfully avoid the bias associated with AR (1) models, it highly depends on the assumption that the median payout ratio represents the firm's target payout ratio. However, Lintner (1956) suggests that firms only gradually adjust dividend payments toward to the target ratio. Previous studies also argue that dividend payout levels significantly differ across companies with different characteristics, suggesting that firms' target payout ratio considerably varies. These ideas warn that equation (3) is also subject to estimation biases. To present robust evidence, we estimate SOA by using models (2), and (3). The estimated SOAs are denoted by SOA <sub>LINTNER</sub> and SOA<sub>LM</sub>, respectively.

The linear regression model is interpreted as follows; Y as the response variable and predictor variables are from X1 to X4, D the dummy variable for either listed or non listed and the residual error E usually unmeasured variable.

Interpreting the Y Intercept; , the Y-intercept, can be interpreted as the value you would predict for Y if X1-X4 = 0.

Interpreting Coefficients of Continuous Predictor Variables; since X1 is a continuous variable, 1 represents the difference in the predicted value of Y for each one-unit difference in X1, if X2 remains constant. This means that if X1 differed by one unit, and X2 did not differ, Y will differ by 1 units, on average.

#### CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

## **4.1 Introduction**

In this chapter, the descriptive statistics of the study variables is discussed. This chapter also discusses the empirical findings of this study and also gives a summary of the findings and interpretations with regard to the study objective. The objective of this study was to find out if there exists a relationship between profitability and earnings of the firm, size of the firm, financial performance, and agency conflicts with the dividend smoothing among the firms listed at the N.S.E.

All companies at the NSE that have been paying dividends for the last five years were used to represent the rest of the companies in the economy.

#### 4.2 Results

The data that was used was that of 30 firms out of the total firms listed at the NSE. These were the firms that had all the required data and those that have been paying dividends for the last five years. Data for each company was computed for a mean and the Independent variable computed. The data was then coded and entered into the SPSS version 17. The following table 1.1 represents the dependent and independent variable computations.

Y (dividend smoothing)	X1 (size)	X2 (earnings)	X3 (profitability)	X4 (growth rate)	X5 (ownership structure)	Company
0.15	6.509	2.009	0.41	0.25	6	Kakuzi
0.14	6.927	2.276	0.55	0.24	9	Sasini
0.07	6.434	4.785	0.24	0.46	4	Car & Gen
0.36	6.349	3.457	0.13	0.08	4	Sameer
0.67	5.233	0.026	0.01	0.09	8	Barclays
0.07	8.129	76.945	1.5	0.22	8	Cfc
0.24	5.157	0.091	0	0.58	16	Со-Ор
0.34	8.183	13.123	7.54	0.68	11	Equity
0.49	8.427	25.481	7.73	0.48	7	КСВ
0.06	7.763	6.915	1.4	0.36	6	National Bank
0.68	8.161	8.861	5.45	0.49	7	Stan Chart
0.15	7.883	79.355	1.4	0.01	11	Kenya Air
0.7	6.91	9.927	1.53	0.38	13	Nation Media
0.11	6.505	3.097	0.23	0.23	6	Standard Group
3.3	6.582	6.931	0.31	0.39	8	Uchumi
0.69	7.532	31.782	5.28	0.34	10	Bamburi
0.95	6.312	3.258	0.09	0.14	3	Crown
0.05	7.085	8.7	0.25	0.36	5	Portland
0.44	8.14	13.117	3.23	0.34	9	Kengen
0.69	7.974	70.023	5.59	0.55	8	KPLC
0.31	7.461	80.141	0.37	0.56	5	Total
0.01	7.09	0.858	0.11	1	7	Britam
0.15	7.249	6.486	1.81	0.43	6	Kenya Re
0.41	7.021	4.582	0.35	0.63	7	Pan Africa
0.06	6.97	3.947	1.15	0.3	7	Centum
0.99	6.865	23.616	2.26	0.35	7	BAT
0.86	7.622	41.198	9.3	0.41	9	EABL
0.03	6.017	1.561	0	0.27	7	Eveready
0.41	7.301	14.144	1.67	0.48	9	Mumias
0.47	8.005	83.527	13.06	0.39	9	Safaricom

**Table 1.1: Computations of Variables** 

(Source: Research data)

Table 1.2 presents how the Y dependent variable was computed for each firm using the formula:

$$D_{it} = g + h (D_{it}^{*} - D_{it-1}) + X_{it}$$

Where:

 $D_{it}$  = Change in dividend for firm *i* from period t-1 to t.

g = coefficient to be extracted based in number of observations in this case 0.1-0.5 based on five years data sets

h = Speed of adjustment estimated as beta 0.1-0.5 based on five data sets.

 $(D_{it}^{*} - D_{it-1}) =$  Target dividend payout ratio (TP) X earnings in year t minus actual dividend paid or median payout of the firm during the period.

 $X_{it} = Random error term$ 

The dividend payout was the most important aspect in the calculations since firms only gradually adjust dividend payments toward to the target ratio. The following table shows results the Y variable computed;

Company	g	h(D^it-Dit-1	Xit	Dividend smoothing
Kakuzi	0.069	0.00325	0.075145	0.147394859
Sasini	0.057	0.00154	0.079802	0.138342088
Car & Gen	0.00764	0.0034	0.062091	0.073130507
Sameer	0.01563	0.1023	0.245324	0.363253723
Barclays	0.29876	0.1231	0.253088	0.674948147
Cfc	0.02345	0.0184	0.026337	0.068186636
Со-Ор	0.1234	0.0542	0.062163	0.239762934
Equity	0.01567	0.1204	0.20786	0.343929962
КСВ	0.2345	0.1265	0.131718	0.492717991
National Bank	0.00243	0.0225	0.032589	0.057519255
Stan Chart	0.2548	0.1462	0.274674	0.675673892
Kenya Air	0.07245	0.0321	0.044133	0.148683205
Nation				
Media	0.2367	0.2316	0.229833	0.698132543
Standard				
Group	0.04023	0.02354	0.046806	0.110576164
Uchumi	1.03653	1.25743	1.001702	3.295662499
Bamburi	0.3208	0.16723	0.200951	0.688980714
Crown	0.40231	0.2487	0.298367	0.949377424
Portland	0.0132	0.0162	0.0166	0.046
Kengen	0.1945	0.1098	0.135374	0.43967441
KPLC	0.2452	0.2541	0.193201	0.692501492
Total	0.1102	0.1309	0.070192	0.311292392
Britam	0.002398	0.002106	0.003964	0.008467771
Kenya Re	0.06523	0.03673	0.052956	0.154915626
Pan Africa	0.1532	0.1392	0.112839	0.40523921
Centum	0.0134	0.0213	0.022262	0.056962025
BAT	0.4012	0.2309	0.361187	0.993287096
EABL	0.3578	0.2388	0.267547	0.864147454
Eveready	0.0103	0.0103	0.013	0.0336
Mumias	0.1532	0.1307	0.126349	0.410248857
Safaricom	0.1812	0.16231	0.12596	0.469469785

Table 1.2 Calculation of the Dividend smoothing

(Source: Research data)

## **4.3 Regression Analysis**

#### **Table 1.3 Regression Analysis Summaries**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.196 <sup>a</sup>	.039	162	.65717

Predictors: (Constant), Ownership structure, Size, Growth rate, Earnings, Profitability (Source: Research data)

Table 1.3 presents the regression analysis and in terms of dividend smoothing with a consideration on ownership structure of the firm, size of the firm, earnings, profitability, and growth. It is evident that for all the firms involved in the study, only 3.9% of the dividend smoothing is explained by the pre-determined factors. The R Square is relatively small; indicating that very little variability in the outcome (3.9%) is explained by the model.

## 4.4 Analysis of Variance

ANOVAa						
		Sum of		Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	.415	5	.083	.192	.963b
	Residual	10.365	24	.432		
	Total	10.780	29			

**Table 1.4: Analysis of Variance** 

a. Dependent Variable: Dividend smoothing

b. Predictors: (Constant), Ownership structure, Size, Growth rate, Earnings, Profitability

(Source: Research data)

Table 1.4 clearly shows that the model was not very strong in predicting the outcome, since the significance level was 0.963, which is by far more than the threshold of 0.05. Thus we can say that the overall model was not that good fit for the data.

The study reveals that the regression model is higher than the residual model which means that the factors do not account to much of the variability on the dividend smoothing. The significance level being above our threshold of 0.05 confirms that there is no significance of dependent factors to the dividend smoothing.

#### Table 1.5: Regression Model Coefficients

		Unstandardized		Standardized		
Model		Coefficients		Coefficients	t	Sig.
		Beta	Std. Error	Beta		
1	(Constant)	1.396	1.506		.927	.363
	Size	142	.215	197	662	.514
	Earnings	001	.006	028	107	.916
	Profitability	.043	.051	.232	.838	.410
	Growth rate	110	.662	036	167	.869
	Ownership	.005	.048	.022	.102	.919
	structure					

**Coefficients**<sup>a</sup>

a. Dependent Variable: Dividend smoothing (Source: Research data)

Y = + 1X1 + 2X2 + 3X3 + 4X4 + 5X5 + E

Dividend Smoothing = 1.396-0.142X1-0.001X2+0.043X3-0.110X4+0.005X5+1.506

From table 1.5 above, the un-standardized coefficients show how the dependent variable varies with an independent variable when all the other factors are held constant. From this, we can say that profitability and ownership structure determine the dividend smoothing of the companies whose data was analyzed, while size, sales (earnings) and growth rate do not determine the dividend smoothing of the companies at the N.S.E.

However, the significant levels indicate values higher than 0.05, thus the variables are not statistically significant in predicting the dependent variable Y which is dividend smoothing. They have a negative significance in relation to dividend smoothing.

From the research question, at 0.05 level of significance, there is no linear relationship between the factors that were presumed to determine dividend smoothing of the company and dividend smoothing of the companies.

Y = the dividend smoothing computed using Linters model to estimate the Speed of adjustment (SOA);  $D_{it} = g + h (D^{**}_{it} - D_{it-1}) + X_{it}$ 

, 1- 6 are coefficients extracted from the analysis.

X1 = size of the firm measured as the natural logarithm of total assets X2 = earnings of the firm measured as the amount of sales growth in revenue annually

X3 = profitability measured by the returns on assets

X4 = growth rate measured by the percentage change in total assets

X5 = ownership structure measured by number of directors

D = dummy variable 1 when listed firm and zero otherwise

E = the random error term

## **4.5 Discussions**

From the regression analysis it is evident that there is no significant influence of the specific factors on dividend smoothing. The analysis indicates that the size of the firm, sales (earnings) and growth rate of the companies had a negative relationship with dividend smoothing. This means that the size, sales (earnings) and growth rate of the firm did not in any way contribute to the dividend smoothing by the firms listed at the NSE. Thus, the size, sales (earnings) and growth rate of the firm of the company are not determinants of dividend smoothing in the firms listed in the NSE where the study was conducted. The profitability of a company had a positive relationship with dividend smoothing. Thus the profitability which includes the return on assets determined the dividend smoothing of the companies studied.

The ownership structure also had a positive relationship with the dividend smoothing. This means that ownership structure which was measured by number of directors who are shareholders determined the dividend smoothing of the companies studied. Therefore the size of the firm, sales (earnings) and growth rate of the companies do not determine the dividend smoothing of the companies studied.

The findings in this study are contrary to the research evidence of Lintner (1956), whereb firms with more persistent earnings series smooth less, while those with more cyclical earnings smooth more. The profitability of a company had a positive relationship with dividend smoothing. Thus the profitability which includes the returns on assets determined the dividend smoothing of the companies studied. This study has some similarities with a study done by Leary and Michaely (2009) on the reason why firms in the United States of America smooth dividends. The study revealed that larger firms, firms with more tangible assets, and firms with lower price volatility and earnings volatility smooth more. The findings also indicated that firms with slower growth prospects and firms that are "cash cows" smooth more.

The ownership structure also had a positive relationship with the dividend smoothing. This means that ownership structure which was measured by number of directors who are shareholders determined the dividend smoothing of the companies studied. Therefore the size of the firm, sales (earnings) and growth rate of the companies do not determine the dividend smoothing of the companies studied.

## CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **5.1 Summary**

Dividend Policy refers to the explicit or implicit decision of the Board of Directors regarding the amount of residual earnings (past or present) that should be distributed to the shareholders of the corporation.

This decision is considered a financing decision because the profits of the corporation are an important source of financing available to the firm (Booth, 2007).

The main objective of the study was to find out the determinants of dividend smoothing among firms listed at the NSE. From the research question, at 0.05 level of significance, there is no linear relationship between the factors that were presumed to determine dividend smoothing of the company and dividend smoothing of the companies.

## **5.2 Conclusion**

From the regression analysis it is evident that there is no significant influence of the specific factors measuring dividend smoothing. The analysis indicates that the size of the firm, sales (earnings) and growth rate of the companies had a negative relationship with dividend smoothing. This means that the size, sales (earnings) and growth rate of the firm did not in any way contribute to the dividend smoothing. Thus, the size, sales (earnings) and growth rate of the firm of the company are not determinants of dividend smoothing in the firms listed in the NSE where the study was conducted. The profitability of a company had a positive relationship with dividend smoothing. Thus the profitability

which includes the earnings after expenses, interest and taxes determined the dividend smoothing of the companies studied.

The ownership structure also had a positive relationship with the dividend smoothing. This means that ownership structure which was measured by number of directors who are shareholders determined the dividend smoothing of the companies studied. Therefore the size of the firm, sales (earnings) and growth rate of the companies do not determine the dividend smoothing of the companies studied.

Dividend generally is not well known in the industry as a major influence on the operations of the business organizations in the financially listed companies. There is need to create an awareness of dividend smoothing in all the organizations, and every shareholder to be made aware of dividends smoothing. This perception is however not across the financially listed companies as others would rather not to pay the dividends and grow. This is because the financial might in the listed companies come out as a crucial factor for growth and expansion, so that there is competitive gain for the payment of dividends in listed companies to create an edge especially in reference to the clientele effect.

Empirical testing has not been able to determine which factors determine dividend smoothing, if any, is correct. Thus, managers use judgment when setting policy. Analysis is used, but it must be applied with judgment.

Managers hate to cut dividends, so won't raise dividends unless they think raise is sustainable. So, investors view dividend increases as signals of management's view of the future.

Dividends are better than capital gains because dividends are certain and capital gains are not. As such the excess cash hypothesis dilemma if the firm has (temporary) excess cash on its hands this year, no investment projects this year and wants to give the money back to stockholders, or it initiates dividend. As such depending on the management desire the firm will determine what to do. Analysis however shows that the firm will most likely use the liquidity as a moderate factor that affects the dividend policy.

Thus in general, from the study, it is evident that the factors that determine the dividend smoothing in the companies studied at the NSE are the ownership structure of the company and the profitability of the company.

### **5.3 Limitation to the study**

The study faced the constraint of limited data on the factors affecting the dividend smoothing of companies that are listed in the NSE. Further the study focused only on the determinants of dividend smoothing for the listed companies. The researcher found the available data useful in formation of a firm foundation to the study and aimed at providing a credible benchmark for future studies. There was a problem acquiring complete and accurate data to use in the research. Availability of the data was also a major challenge since many companies are not willing to release their confidential information to the public. There was also the cost involved in the acquisition of the data.

#### **5.4 Suggestions for further studies**

This research was mainly focused on finding the factors that determine the dividend smoothing of companies listed at the Nairobi Stock Exchange. From the data obtained, the factors found to determine the dividend smoothing were the ownership structure of the company and also the profitability of the company. This research can be extended to look for other factors that determine the dividend smoothing, since I believe there are many more that were not included in this research.

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Appendix 1	
FIRMS LISTED AT NSE BY SEGMENTATION	(62)

AGRICULTURAL	COMMERCIAL AND SERVICES		
Eaagads Ltd	Express Ltd Kenya Airways Ltd		
Kapchorua Tea Co. Ltd	Nation Media Group		
Kakuzi	Standard Group Ltd		
Limuru Tea Co. Ltd	TPS Eastern Africa (Serena) Ltd		
Rea Vipingo Plantations Ltd	Scangroup Ltd		
Sasini Ltd	Uchumi Supermarket Ltd		
Williamson Tea Kenya Ltd	Hutchings Biemer Ltd		
	Longhorn Kenya Ltd		
TELECOMMUNICATION AND TECHNOLOGY	AUTOMOBILES AND ACCESSORIES		
AccessKenya Group Ltd	Car and General (K) Ltd		
Safaricom Ltd	CMC Holdings Ltd		
	Sameer Africa Ltd		
	Marshalls (E.A.) Ltd		
BANKING	INSURANCE		
Barclays Bank Ltd Ord 0.50	Jubilee Holdings Ltd		
CFC Stanbic Holdings Ltd	Pan Africa Insurance Holdings Ltd		
I&M Holdings Ltd	Kenya Re-Insurance Corporation Ltd		
Diamond Trust Bank Kenya Ltd	Liberty Kenya Holdings Ltd		
Housing Finance Co Ltd	British-American Investments Company		
Kenya Commercial Bank Ltd	Kenya) Ltd		
National Bank of Kenya Ltd	CIC Insurance Group Ltd		
NIC Bank Ltd			
Standard Chartered Bank Ltd			

Equity Bank Ltd	
The Co-operative Bank of Kenya Ltd	
INVESTMENT	MANUFACTURING AND ALLIED
Olympia Capital Holdings ltd	B.O.C Kenya Ltd
Centum Investment Co Ltd	British American Tobacco Kenya Ltd
Trans-Century 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
CONSTRUCTION AND ALLIED	ENERGY AND PETROLEUM
Athi River Mining	KenolKobil Ltd
Bamburi Cement Ltd	Total Kenya Ltd
Crown Berger Ltd	KenGen Ltd
E.A.Cables Ltd	Kenya Power & Lighting Co Ltd
E.A.Portland Cement Ltd	Umeme Ltd
GROWTH ENTERPRISE MARKET SEGMENT	
Home Afrika Ltd	

Source (www.nse.co.ke)

		Арр	enuix 2		
Company's					
Name					
Year/	Taxes paid	Total	Profit after	Total assets	Number of
Variable	to KRA	earnings	tax and	as per	directors
			interest	balance	who are
				sheet	shareholders
2008					
2009					
2010					
2011					
2012					
	1	1	1	1	

## Appendix 2

# Appendix 3