

**THE RELATIONSHIP BETWEEN EARNINGS PER SHARE AND
DIVIDENDS PER SHARE OF COMPANIES LISTED AT THE
NAIROBI SECURITIES EXCHANGE**

**BY
COLLINS C. KIBOI**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF
THE DEGREE OF MASTER OF SCIENCE (FINANCE), SCHOOL OF
BUSINESS, UNIVERSITY OF NAIROBI**

OCTOBER 2015

DECLARATION

This is my original work and has never been presented for the award of degree in any other university.

Signature..... Date.....

Collins Kiboi Chepsakat

D63/67712/2013

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

Signature..... Date.....

Dr. Duncan Elly Ochieng', PhD, CIFA

Lecturer, Department of Finance and Accounting

School of Business

University of Nairobi.

ACKNOWLEDGEMENTS

I thank God for His unceasing love in granting me the opportunity to pursue my MSC degree and the ability to successfully undertake the research. I also express my sincere gratitude to my supervisor, Dr. Duncan Elly, for his invaluable guidance throughout the research work without which it would have been a rocky road to trade on. Finally, I also appreciate the University of Nairobi for the offering a flexible MSC programme to allow even for the employed to fulfill their academic dreams.

DEDICATION

This research work is dedicated to my parents for their support and encouragement throughout my study period and to my wife, Annet Manja Kiboi, for her patience even as I studied deep into the night to see a successful end to the degree.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENTS	iii
DEDICATION	iv
LIST OF TABLES	vii
ABBREVIATIONS	viii
ABSTRACT	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Earnings per Share.....	1
1.1.2 Dividends per Share	2
1.1.3 Earnings per Share and Dividends per Share	3
1.1.4 Companies Listed at the Nairobi Securities Exchange.....	5
1.2 Research Problem	6
1.3 Research Objective	9
1.4 Importance of the Study	9
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Theoretical Framework	10
2.2.1 The Dividend Irrelevance Theory	10
2.2.2 The Bird-in-Hand theory	11
2.2.3 The Clientele Effect.....	12
2.2.4 The Dividends' Signaling Effect.....	13
2.2.5 The Tax Differential Theory	13
2.3 Determinants of Dividend Policy	15
2.3.1 The Firm's Financial Performance	15
2.3.2 The Firm's Leverage	15
2.3.3 The firm's Growth Prospects and Retained Earnings	16

2.3.4 The Firm's Liquidity	17
2.4 Empirical Review	17
2.5 Summary.....	23
CHAPTER THREE: RESEARCH METHODOLOGY.....	25
3.1 Introduction	25
3.2 Research Design	25
3.3 Target Population of Study and the Sample Size	25
3.4 Data Collection.....	25
3.5 Data Analysis.....	26
CHAPTER FOUR: DATA ANALYSIS AND RESULTS	28
4.1 Introduction	28
4.2 Descriptive Statistics	28
4.3 Diagnostic and Correlation Analysis.....	29
4.4 Earnings per share and Dividends per share.....	30
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	33
5.1 Introduction	33
5.2 Summary of Findings	33
5.3 Conclusions	34
5.4 Limitations of the Study	35
5.5 Recommendations	35
5.6 Suggestions for Further Research.....	36
REFERENCES	37
APPENDICES	42
Appendix 1: List of Companies Listed at the NSE.....	42
Appendix 2: Data for Variables in the Study	44

LIST OF TABLES

Table 4.1: Descriptive Results of the Market.....	28
Table 4.2: Mean of variables by Industry.....	29
Table 4.3: Correlation Matrix.....	29
Table 4.4: Summary Descriptive Statistics	30
Table 4.5: Effect of EPS on DPS.....	31

ABBREVIATIONS

CMA	Capital Markets Authority
DPS	Dividend per Share
EPS	Earnings per Share
FRPS	Free Reserves per Share
IAS	international accounting Standards
Ltd	Limited Company
MM	Miller & Modigliani
NPV	Net Present Value
NSE	Nairobi Securities Exchange
OPPS	Operating Profits per Share
POR	Payout Ratio
SPSS	Statistical Package for the Social Science

ABSTRACT

The relationship between EPS and DPS isn't a straight line relationship as the percentage of earnings paid off to the shareholders as dividends isn't definite and fixed. The objective of this study was to establish the relationship between EPS and DPS for companies listed at the NSE, the results of which will be of great importance to the companies, the investors, the stock brokers and even the general public in decision making. This study adopted a correlation research design with the population of the study being all the 64 companies listed at the NSE as at December, 31 2014. The sample size was all the 64 companies listed at the NSE but data for only 38 firms was available for the period. A 10-year period during the year 2005 to 2014 was covered. The analysis of the study was based on secondary data and involved the use of descriptive analysis, correlation analysis and multiple regression model given that various variables were adopted as independent variables. The study found that EPS had a positive and significant effect on DPS while leverage, liquidity, and retained earnings had negative but insignificant effects on DPS. It is, therefore, concluded that dividend policy of a listed firm in Kenya is strongly influenced by earnings per share i.e. the higher the EPS the higher the DPS but not by leverage, liquidity or retained earnings. The study recommends that firms should focus on improving their earnings in as this will translate to a positive dividend policy. Investors and analysts who are interested in investing in firms that can pay higher dividends should use the EPS as a basis for forecasting the DPS of the firms in which they seek to invest or advise their clients on where to invest. The study also recommends that policy makers should incorporate the role of EPS in assessing the DPS of firms. As such, policies that help improve the earnings of firms should be encouraged to enhance dividend payments for listed firms as well as for other organisations. It is suggested that more studies be carried out in this area to examine other determinants of dividend policy other than EPS, leverage, liquidity, and retained earnings. Such studies will help improve the understanding on how dividend policies in organisations are shaped.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The term 'Earnings' refers to the amount attributable to the company as net revenue in any given financial year under review. Indeed, several professionals and scholars alike have used the terms 'earnings' and 'profits' interchangeably to refer to the same thing and can basically be referred to be the primary and basic objectives of any business. As a matter of fact, earnings represent a measure of the change in the value of the firm to common equity holders during a period (Nichols and Wahlen, 2004).

Shareholders are the company's owners and as such are entitled to a share of the profits/earnings. They therefore receive their share of profits in form of dividends and therefore the more the firm realizes in profits/earnings, the more likely it is to be higher levels of dividends and the more the shareholder will receive as her/his share. Ranti (2013) observed that there's a significant positive association between the financial performance of firms and dividend payout of firms listed in Nigeria. Baker and Powell (2000) affirmed that a good financial performance of a firm translates to high dividends to shareholders. The earnings realized by the firm are a good indicator of the firm's financial performance. It is therefore worth noting that the company's earnings play a very critical role in dividend pay-outs.

1.1.1 Earnings per Share

Lev (1989) defines Earnings as the 'bottom line' or 'net income' and the single most important item in the firm's financial statements. They indicate the extent to which a company has engaged in value-added activities. Lev (1989) in fact points out that earnings are a signal that helps direct resource allocation in the capital markets. An increase in the

firm's earnings represents an increase in company value while a decrease in earnings represents a decrease in company value. Earnings per Share (EPS) are the firm's earnings divided by the number of ordinary shares issued by the firm i.e. it's the firm's net income per unit of ordinary shares issued. Small firms have limited access to additional capital and therefore retain a higher proportion of earnings for expansion needs (Fama and French, 2001).

Firms need to carry out effective 'earnings management' and at the same time the executive needs to understand the effect of the firm's policies so that they can make the best possible decisions for the company (Lev, 1989).

1.1.2 Dividends per Share

'Dividend' is commonly defined as the distribution of earnings (past or present) in real assets among the shareholders of the firm in proportion to their ownership (Sujata, 2009). They are therefore distributions made out of the company's profits/earnings and the decision to pay out dividends is based on the firm's dividend policy. A dividend per Share (DPS) is the sum of dividends declared by a company divided by the number of outstanding ordinary shares issued.

According to Hashim, Shahid, Sajid and Umair (2013), there are varied reasons why companies pay dividends. It may either be a way to reduce the rise in agency cost between managers and shareholders or to reduce the uncertainty of the investors of the company. It could be a goal of the investor to receive returns on continuous basis, so will prefer to invest in firms paying dividends. The research also concludes that firms paying more dividends have an easy access to the capital markets and dividends also effect the stock valuation.

Dividends are mostly paid out by companies that are in a better cash position and whose earnings can be said to be best able and sound (Kania and Bacon, 2005). According to Denis and Osobov (2008), large, mature and more profitable firms are thought to be highly probable to pay dividends as they can even source for such funds to pay out dividends from cheap external debt sources at their disposal. Erick (2010) also establishes that the firm's liquidity position, its earnings and leverage, the profitable opportunities available and its debt to equity ratio are important determinants of dividend payments by firms from the financial sector listed at the Nairobi Securities Exchange (NSE).

A decision to pay dividends for the first time puts investors in an expectation mode for future dividends which can be an undoing for future company growth. Newly listed firms appear to fail to initiate dividend payments when, according to their characteristics, would be expected to do so (Joan, Roni and Schmalz, 2014). An increase in the amount of dividends paid also raises the investors' expectation bar for the company, and reducing or eliminating an existing dividend payment may have dire consequences on the share price.

Tax implications may also be another factor in the firm's decision not to pay out dividends. This is known to be beneficial to the shareholders as the tax payable on dividends is high as compared to the capital gains tax payable on profits realized from the sale of an appreciated share (Litzenberger and Ramaswamy, 1979). This can be a very good tax management tool that the company can use to the benefit of its owners.

1.1.3 Earnings per Share and Dividends per Share

Gordon (1959) comes up with three possible hypotheses with respect to what an investor pays for when he acquires a share of common stock. The investor could be acquiring a share of stock because the dividend is literally the payment stream that he expects to receive and the growth in the dividend is also of his concern. The investor could also be

buying the EPS when the earnings are distributed to him in form of cash dividends or are retained giving rise to an increase in the share value. Finally, Gordon (1959) also hypothesizes that the investor could also be buying both the dividends and the EPS though he concluded that just like any other asset, a share of stock is purchased for the expected income it provides i.e. the dividend or the EPS but it can't be both and, therefore, affirms that the hypothesis is conceptually weak.

In his study on the distribution of incomes of corporations, Lintner (1956) found out that earnings and previous year dividends influence the dividend payment of firms in the developed markets. He argued that managers prefer a stable dividend policy and are reluctant to increase dividend to a level that cannot be sustained. The assertion, therefore, means that dividends are usually payable by firms to the extent that they are sustainable.

The relationship between EPS and DPS could be specific to the firm, the sector, the country, etc. From their survey of firms listed at the New York stock exchange, Baker and Powell (2000) concluded that dividend determinants are industry specific and the anticipated level of future earnings is the major determinant.

Skinner (2006) studied the evolving relation between earnings, dividends and stock repurchases over time using Lintner (1956) model, and found out that the relation weakens considerably after 1980 to which he attributed to the dwindling management willingness to pay increased dividends. The study established that for the firms that pay both dividends and repurchases, the relationship between earnings and dividend payments is very strong, with support that such firms are now more likely to use repurchases to pay out earnings increases hence explaining the increasing reluctance to increase dividends. Skinner (2006) also established that the strength of the relationship between earnings and payouts increases when the dividends and repurchases are combined.

Musa (2009) examined the relationship between dividend policy of firms and current earnings. The study concluded that earnings have a significant positive impact on the dividend policy of firms. The study also considered other variables like net current assets, investment, amongst others and their effect on dividend payments. The findings on the effect of earnings on dividend payments supported the findings of Fama and French (2001) who determined that various factors influence the firm's dividend payout including, amongst others, earnings, investment opportunities and firm size.

Muindi (2006) studied the relationship between EPS and DPS for 47 companies listed at the NSE from 2000-2004 and concluded that there existed a significant positive relationship between the two variables. The study, however, found a negative relationship between EPS and DPS for the companies in the finance and investments sectors he attributed the negative relationship to the likelihood of payments being made from previous' periods retained earnings.

1.1.4 Companies Listed at the Nairobi Securities Exchange

The Nairobi Securities Exchange is the principal securities exchange in Kenya. Since 1964, The NSE 20-Share Index is an index popularly used to measure performance of twenty blue chip companies in Kenya which have consistently recorded positive financial results. On 18th Feb. 1994, the NSE 20-Share Index recorded an all-time high of 5030 points. In 2008, the NSE All Share Index (NASI) was introduced as an alternative index to the NSE 20-Share Index to measure the overall market capitalization rather than the price movements of select counters as is the role with the NSE 20-Share Index, with a base value of 100 as of January 2008.

As at 2014, December 31, the number of companies listed at the NSE stood at 64. These companies are classified into 10 sectors: Agriculture (7 firms), Automobile and Accessories (10 firms), Banking (11 firms), Commercial and Services (10 firms), Construction and Allied (5 firms), Energy and Petroleum (5 firms), Insurance (6 firms), Investment (6 firms), Manufacturing and Allied (10 firms) and Telecommunication and Technology (1 firm) depending on its operations.

The NSE Listing Manual highlights that every listed issuer of securities is required to prepare an annual report containing audited annual financial statements in compliance with IAS and submit to the NSE within four months of the close of its financial year and the period covered by financial statements should be no less than twelve months. Many firms listed at the NSE are known to provide either stock dividend or cash dividend to their shareholders from the profits realized in the year. Munyua (2004) recommends for companies to adopt stable dividend policies to balance between shareholder and corporate interest as the Kenyan investors grow increasingly eager to reap the benefits of shareholding. The NSE will be used as the primary source of data for this study because it provides historical financial statements for the listed companies from which the EPS and DPS are presented.

1.2 Research Problem

The relationship between EPS and DPS isn't a straight line relationship as the percentage of earnings paid off to the shareholders as dividends isn't definite and fixed. Munyua (2014) finds out that dividend distribution is a very important factor to any organization for effective goal achievement to satisfy the shareholders and also notes that shareholders make investments in equity capital with expectations of making earnings in the form of dividends and capital gains and firms should therefore make a proper balance between dividends and retained earnings.

Many firms listed at the NSE provide either stock dividend or cash dividend to their shareholders. Munyua (2004) recommends for companies to adopt stable dividend policies to balance between shareholder and corporate interest no matter the form of dividend paid. This is in line with Lintner's (1956) assertion that managers prefer a stable dividend policy and are reluctant to increase dividend to a level that cannot be sustained. Lintner's assertions set the platform for further debate on dividend policy and the results from researchers and scholars alike are mixed.

From past studies, differences in findings in the earnings-dividend relationship still exist. The study by Oyejide (1976) found a strong support for Lintner's model in Nigeria by asserting that a strong relationship exists between current earnings and preceding period dividends though the increase in dividends is only up to a level that is sustainable. In their study on the determinants of corporate dividend policy, Baker and Powell (2000) found a strong positive relationship between the firms' financial performance and dividend payments. Fama and French (2001) established that the firm's earnings, firm size, profitability, liquidity and investment opportunities available affect its dividend policy. In Nigeria, Musa (2009) also established that current earnings, previous dividend, cash flow, affect dividend payments with investment as an insignificant determinant hence contradicting the finding of Fama and French (2001). Gupta and Banga (2010) studied the determinants of corporate dividend policy in India and found that profitability was of no consequence on the dividend rate. Kania and Bacon (2005) also found that profitability has a significant and inverse relationship with dividend payments. In Kenya, Muindi (2006) found a negative relationship between EPS and DPS for firms listed at the NSE in the finance and investment sectors but recommended for future research to be done after five years to confirm, or otherwise, this relationship as there will be changes in the economic, technological and global factors. The findings of Kania and Bacon (2005),

Gupta and Banga (2010) and Muindi (2006) are not consistent with the findings of Baker and Powell (2000) and Oyejide (1976) and as such the relationship between earnings and dividends still remains a puzzle and there exists a knowledge gap and the relationship needs further evaluation to fill the gap. As a control test, other factors have been found to impact on dividend payments. Erick (2010), established that the main factors influencing a firm's dividend policy included; its liquidity position, earnings and leverage, the effects of profitable opportunities (and hence the need for retained earnings) and the company's debt to equity ratio on the dividend Payout Ratio. Gupta and Banga (2010) found out that leverage, liquidity, ownership structure and growth affect the firm's payout policy. The factors should therefore be evaluated to see to what degree they are significant in determining the dividend payment decisions of the firm, in addition to the firm's earnings' role in dividend payments.

The study, therefore, sets out to satisfy the puzzle that still exists in the relationship between EPS and DPS by confirming that the positive relationships surely exist in all the Kenyan economic sectors except the finance and investment sectors (Muindi, 2006) or cross-border findings by Oyejide (1976), Baker and Powell (2000) and Musa (2009) of strong positive relationships cutting across all economic sectors hold in the Kenyan context. The study will also show the significance of other dividend-determining factors (namely; leverage, liquidity and retained earnings) as established by the studies by Fama and French (2001), Erick (2010), Gupta and Banga (2010) and other researches. The research, therefore, sought to answer two main questions; does a relationship exist between DPS and EPS for the companies listed at the NSE? If yes, what and to what extent is the relationship?

1.3 Research Objective

This study sought to establish the relationship between EPS and DPS for the companies listed at the NSE.

1.4 Importance of the Study

Investors have different investment objectives and the study will help them understand whether to expect immediate or longer-term returns from their investment portfolios if they invested in any of the companies under research. A significantly positive relationship will intimate expected shorter-term returns while a weak, negative or zero relationship may be interpreted to mean a potential longer-term returns on the basket.

The Stock brokers and Stock agents whose investment advisory services are of due importance to the investors will also benefit from the study. The findings of the study will help enrich their advice to the investors given the varied investment goals of their clients.

This will also help the companies that may want to adapt its dividend policy to the general recommendation generated based on the relationship that exists between the two variables. The companies can use the findings as a platform to base their dividend policies in meeting both corporate and shareholder interests.

In the scholarly sense, the research will recommend future research areas for the scholars and researchers given the findings. The researchers can therefore have a ground to add knowledge into the wider area of earnings and dividends.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the related literature in four sections. Section one covers the introduction whereas section two covers the theoretical framework with special focus put on dividend theories. The third section covers the empirical review with section four providing a summary of the literature review. The study focuses on the effect that the earnings of the firm has on the dividend policy it adopts.

2.2 Theoretical Framework

Many researchers and scholars have tried to determine how best to describe what dividend policy a firm adopts and various theories and propositions have been adapted including the dividend irrelevance theory, the bird-in-hand theory, the clientele effect, the dividends' signaling theory and the tax differential theory.

2.2.1 The Dividend Irrelevance Theory

Miller and Modigliani (1961) came up with the Dividend Irrelevance theory and argued that the dividend policy adopted by the company is irrelevant in evaluating worth/value received by shareholders from the shares held in the world without taxes and market imperfections. They argued that firms can distribute the profits of the firm to the shareholders either through capital gains or dividend payments. This means that the more shares held, the more dividends received when they are declared. These dividends are a form of interest for the investment. Lack of investment opportunities, earnings available for investment, the financial leverage of a firm, its debt equity ratio and the company's liquidity position are the main determinants of a payout policy. It also depends on the preferences of investors and potential investors.

The Residual Theory asserts that a firm only pays dividends after factoring in the need for funds to finance positive Net Present Value (+NPV) projects. Therefore, dividends are a left-over of earnings i.e. earnings net of retained earnings (for +NPV projects) and essentially the projects will be beneficial to the shareholders in the long run. It argues that companies don't need to incur debt if they have the privilege of retaining part of its earnings and finance company growth and investments.

The issue of Dividend Tax and Capital Gains Tax also accompany this theory. In the Kenyan context, even in the wake of the introduction of the capital gains tax, dividends are still taxed at a high rate compared to the tax applied on the share value appreciation, otherwise referred to as capital gains (Miller and Scholes, 1978). According to Al-Malkawi (2007) many investors prefer capital gains and not dividends and focusing solely on dividends is less desirable and the earnings multiplier remains a popular approach to valuation of shares.

2.2.2 The Bird-in-Hand Theory

Gordon and Lintner (1963) suggest that investors see current earnings as less risky than future expected dividends or capital gains. They point out that most investors are risk averse and as such would prefer certain dividend payments now than a promise of better returns in future. They also state that current dividend payments reduce investor uncertainty and hence cause the investors to discount the firm's earnings at a lower rate and place a higher value on the firm's stock. Conversely, a reduction in dividend payments (or zero dividends) increases investor uncertainty causing them to raise the required return and lowering the stock value.

According to Lintner (1956), firms in developed markets target their dividend payout ratio with the help of current earnings and past dividends. Therefore, to reverse such targets, the firm needs to make various modifications in its dividend policy and hence there's need for firms to have stable dividend policies. He further suggests that there's a direct relationship between the firm's dividend policy and its market value. In their study on dividend payouts and firm performance, Murekefu and Ouma (2012) found that the firm's performance is majorly affected by the firm's dividend payout and real present earnings are preferred by investors than capital gains.

2.2.3 The Clientele Effect

This relates to the tendency for investors with similar investment objectives/goals and strategies to invest in a company with a dividend policy that suits their appetites. When the company changes its dividend policy, the investors will most likely sell off their stakes in the company and buy shares from the company that adopts the policy of their choice. Miller and Modigliani (1961) argue that a clientele effect exists by stating that a firm attracts shareholders whose dividends correspond to the payment pattern and stability of the firm itself.

The theory assumes that investors are partial and investor preferences are therefore a key element in the choice of the companies to invest in, based on the dividend policies of the company. Investors who desire stable dividends as a source of income hold the stock of firms that pay about the same dividend amount each period (Miller and Modigliani, 1961). Likewise, investors who prefer to earn capital gains are more attracted to growing firms that reinvest a large portion of their earnings, favoring growth over a stable pattern of dividends (Miller and Modigliani, 1961).

2.2.4 The Dividends' Signaling Effect

According to John and Williams (1985), dividends might reveal corporate characteristics to outsiders, completely or partially, with or without dissipative costs. Optimally smooth dividend payments over time made by a company to its shareholders may be interpreted by the outsiders to mean a good firm and management reputation. Many investors will be tempted to invest in the company's shares and hence improving on the share price and the ultimate market value of the firm as the company will be seen to be making continual positive earnings/income (even if this isn't the case).

According to Miller and Modigliani (1961), a dividend reduction conveys a message that future earnings prospects are poor. They base this on the assumption that the signaling effect of dividends conveys information about future earnings. The changes in dividend policies therefore give the message about the direction of the firm's future cash flows. Al-Malkawi (2007) also points out that there exists information asymmetry between the managers and outsiders contrary to MM assumptions of information being costless and available to all and the management normally uses earnings and dividends as a tool to convey private information to shareholders.

According to Mwaura, Ganesh and Waweru (2012), investors use dividends as a signal about the firm's future prospects. These findings were established in their study on the signaling hypothesis by examining the displacement properties of dividends. This brings the findings into a local/Kenyan perspective.

2.2.5 The Tax Differential Theory

This theory arose as an argument against Modigliani and Miller (1961) unreal assumption of a world without taxes. According to Miller & Scholes (1978), taxes actually exist and dividend payments are taxed at a higher rate than capital gains. The theory argues that

investors would, therefore, prefer capital gains to dividend payments as the capital gains should be interpreted as a good measure of the company's financial strength.

Litzenberger and Ramaswamy (1979) put forth an argument that investors prefer lower dividend pay-out companies to avoid current taxation. Dividends are taxed at the year of payment while capital gains are taxed upon the sale of the stock. Effectively, based on the time value of money concept, dividend tax represents a higher cost of capital compared to capital gains tax.

The dividend theories reviewed above are important in determining the dividend policy adopted by a firm some of the theories will be relevant to this study. According to Miller and Modigliani (1961), once the company decides to pay dividends, it may establish a somewhat permanent dividend policy, which may in turn impact on investors and perceptions of the company in the financial markets. Whereas the bird in hand theory will attempt to answer whether the present-day investors prefer capital gains or a current earning in form of dividend, the tax differential theory confirms whether the investors prefer current taxation imposed on dividends or opt for delayed but lower-rate taxation on capital gains. The clientele effect and the residual theory will be relevant in ascertaining whether the present-day investors value capital gains and hence the issue of retained earnings for future growth as opposed to dividend payments based on their investment objectives, or otherwise. On the contrary, the unrealistic assumptions of the dividend irrelevance theory will somehow render the theory irrelevant in this study since the issue of taxes and market imperfections are real market elements. Since, the study is on the firms' financial period's performance indicators and not on the future performance indicators, the dividends' signaling effect won't play a key part in this study.

2.3 Determinants of Dividend Policy

The firm's dividend policy represents a plan to be followed whenever the dividend decision is made. Firms therefore develop policies that are consistent with their goals and as such, various factors play a part in formulation of a firm's dividend policy. Mainly, the firm's financial performance (and hence its earnings), its leverage, liquidity and growth prospects (and hence the need for retained earnings) have been suggested by various researchers to be the major determinants of dividend policy.

2.3.1 The Firm's Financial Performance

More always than not, profits are used to pay out dividends and therefore the more the firm realizes in profits/earnings, the more likely it is to be higher levels of dividends. Ranti (2013) observed that there's a significant positive association between the financial performance of firms and dividend payout of firms listed in Nigeria. This was in line with the findings of Baker and Powell (2000) who comprehensively affirmed that a good financial performance of a firm translates to high dividends declared to shareholders.

In his study on determinants of dividend payout for companies listed at the NSE, Onger (2014) found that earnings, liquidity, company size and profitability are significant determinants of dividend policy. In Bangladesh, Abu (2012) also found out that net income is the most significant determinant. However, in an interestingly contradicting study, Kania and Bacon (2005) maintained that profitability is significant and negatively associated with dividend payout.

2.3.2 The Firm's Leverage

Rozeff (1982) and Al-Kuwari (2009) opined that a significant negative association exists between firms' financial leverage and the dividend payout decisions of the firms. The studies attribute this to the need for such firms to reduce the transaction costs associated

with external financing. It's, however, also argued that firms that can easily access external funding from various lenders can borrow funds to pay out dividends at relatively lower rates of interest compared to those that have limited sources of external funding.

Loan agreements usually have restrictive clauses that forbid firms from paying cash dividends until a certain level of earnings has been achieved hence protecting the interests of creditors of the company. Ranti (2013) established that there's a significant inverse relationship between firms' financial leverage and the dividend policy decisions of listed firms in Nigeria as the firms strive to reduce the risks it is exposed to by debt.

2.3.3 The firm's Growth Prospects and Retained Earnings

The firm's financial requirements are directly related to how much it expects to grow and the assets it is in need of acquiring. As such, there's need for the firm to evaluate its profitability and the ability to raise funds from external sources with special consideration placed on the associated risks. A firm with high investment and growth aspects will usually pay fewer dividends (or none at all) to enable it fund the investment projects adequately from the firm's profits and from external sourcing. Mbuki (2010) found out that firms pay dividends because they lack investment opportunities, have available cash to pay dividends and the sustainability of the dividend payment in the future. These findings found further support from the findings of Erick (2010).

Large, mature and established firms generally have the ability to access external funding from varied sources at lower rates given their ability to negotiate on the applicable rates hence are in position to pay out dividends to the firm's shareholders. Baker and Powell (2000) brought in the aspect of firm size to the whole issue of dividend payout decisions made by firms in support of this argument. In the same breathe, small firms or ones which

are in the start-up, growth and exit stages of the business life cycle are less likely to pay out dividends unless their dividend policies expressly dictate them to do so.

2.3.4 The Firm's Liquidity

The firm's willingness and ability to pay cash dividends is generally constrained by the amount of liquid assets available. Firms though have the ability to borrow funds to pay dividends but lenders are generally reluctant to make such loans since no tangible operational benefits will be derived from the usage of such funds by the firms hence the firm may experience problems in servicing the loan.

As found out by Fama and French (2001), the liquidity of the firm, earnings and investment opportunities available and ownership structure determine the dividend payment policy. Gupta and Banga (2010) and Kania and Bacon (2005) established that liquidity plays a crucial role in dividend determination. Anil and Kapoor (2008) found that liquidity and beta (year-to-year variability in earnings) are the notable determinants of dividend payout ratio of the Indian Information Technology sector but sales growth, corporate tax and cash flows do not explain the dividend payment pattern in the sector.

2.4 Empirical Review

A Dividend Policy is the firm's dividend payout policy followed by managers in deciding the pattern and size of cash dividends payable to shareholders over time (Frankfurter and Wood, 2003). Fama and Babiak (1968) conducted a study on dividend policy by studying the determinants of dividend payments. The study concluded that the firm's earnings significantly determine the dividend policy as adopted by the firm. Further, the study highlighted that other factors such as the available investment opportunities and constraints on dividend policy fairly affected the dividend policy of a firm. The findings of

Fama and Babiak (1968) confirmed the robustness of Lintner's model's view that managers prefer a stable dividend policy and are reluctant to increase dividend to a level that cannot be sustained.

There are many factors that determine dividend payout policies adopted by firms. The study by Fama and Babiak (1968) concluded that net income seems to provide a better measure of dividend than cash flows. Baker, Farrelly and Edelman (1986) surveyed 318 New York stock exchange firms and concluded that the major determinants of dividend payments are anticipated level of future earnings and pattern of past dividends. Pruitt and Gitman (1991) registered a feedback from financial managers of the 1000 largest U.S.A firms that current and past year's profits are important factors influencing dividend payments and found that risk i.e. the year to year variability of earnings also determine the firms' dividend policy.

Dhameja (1978) studied the dividend behavior of Indian companies by classifying them into Growth and Controlled Groups, and established that growth is inversely related to dividend payout and was found to be significant. The findings of the study, however, made a general conclusion that dividend decisions are better explained by Lintner's model with current profit and lagged dividend as the main explanatory variables. In other related works, Mahapatra and Sahu (1993) concluded that cash flow is a major determinant of dividend payments followed by net earnings hence contradicting Fama and Babiak (1968) findings. In a study similar to that of Pruitt and Gitman of the USA, Bhat and Pandey (1994) undertook a survey of managers' perceptions of dividend decisions and found that managers perceive current earnings as the most significant factor.

Fama and French (2001) determined that various factors influence the firm's dividend payout including earnings, firm size, profitability, liquidity, investment opportunities available and ownership structure. These findings are in line with the findings of Fama and Babiak (1968) but not those of Baker, Farrelly and Edelman (1986) who concluded the major determinants of dividend policy are patterns of past dividends and anticipated future earnings.

Kania and Bacon (2005) examined the impact of liquidity on the dividend policy of a corporation by analyzing the financial data of over 10,000 publicly traded firms. The study concluded that a strong positive relationship existed between the two variables. This is on assumption that the firm's willingness and ability to pay cash dividends is generally constrained by its liquidity or cash availability.

A growing company with investment and further growth prospects will likely shun from paying dividends (Denis and Osobov, 2008). The study attributes this to the fact that the firm will use the funds to acquire new assets or start a new project. It can even go in to buy out another company as one of its expansion strategies. The company will therefore use the retained earnings as an internal source of investment funds. Higgins (1972) shows a direct link between growth and financing needs of a firm by arguing that the firm's Payout Ratio is negatively related to the firm's need for funds to finance its growth opportunities hence the need to retain part of its earnings.

Using the Lintner (1956) model, Firer, Gilbert and Maytham (2008) studied the dividend policy in South Africa to establish whether the typical practice of USA firms of setting long-term dividend payout ratios and dividend changes to lag earnings changes in order to give management time to assess permanence of any earnings changes was consistent with the practice of South African firms. The findings suggested that South African managers

hold attitudes very similar to those found by Lintner (1956) when looking at dividend pay outs. This is to the extent that the managers target a payout ratio and are very conservative when setting dividends in order to avoid having to cut them in future.

Musa (2009) examined the relationship that exists between five variables – current earnings, previous dividend, cash flow, net current assets and investment – and the firm's dividend policy of firms quoted at the Nigeria Stock Exchange (SEC). The study provided evidence that earnings, previous dividend and cash flow all have significant positive impact on the dividend policy of the quoted firms but no statistical evidence of a relationship between investment and current assets of the firms in Nigeria. The results confirmed the empirical findings of Oyejide (1976).

Gupta and Banga (2010) studied the determinants of corporate dividend policy and found that leverage and liquidity have a strong relationship with dividend rates of Indian companies. The firm's ownership structure and growth were shown to have a less significant effect on the dividend policy whereas profitability was established to be of no consequence on the dividend rate.

Ebrahimi and Areezo (2011) concluded that in some years of their research period, shareholders paid special attention to the firms' current earnings and dividends, and in other years of study, there was not a significant relationship between these variables. These results are supported by the findings of Fama and Blahak (1968) and Easton and Harris (1991) who mentioned that the changing attitudes of shareholders during different years could be due to other economic, social and political factors in Iran. This is consistent with the recommendations of Muindi (2006) of changes in technology, economic and global factors and its effect on the EPS-DPS relationship.

Al-Kuwari (2009) opined that a significant negative association does exist between firms' financial leverage and the dividend payout decisions of the firms. They attribute this to the need for such firms to reduce the transaction costs associated with external financing. Though a firm may have the ability to borrow funds to pay out dividends, the firm will be reluctant to enter into more debt obligations. This finding is in line with the findings of Rozeff (1982) in his study of the determinants of dividend payout ratios. Furthermore, Ranti (2013) established that the association between the financial leverage of a firm and its dividend payout ratio is negative of the firms listed in Nigeria and points this to the fact that loan agreements usually have restrictive clauses that forbid firms from paying cash dividends until a certain level of earnings has been achieved.

In his study 'The Dividend Decision of Tata Steel in relation to EPS', Ghose (2013) concluded that there's a correlation between DPS & EPS , OPPS & FRPS. In so doing he concludes that a Dividend decision is a very important decision of Corporate Finance and is influenced to a greater effect by EPS, OPPS and FRPS of the firm. The positive correlation between these variables is interpreted to mean high dividends if the company reports high and increased earnings, operating profits and free reserves compared to if it reports the inverse.

In Kenya, Muindi (2006) studied the relationship between EPS and DPS for all companies listed at the NSE from 2000-2004. Based on the analysis done on the 47 listed companies, he concluded that there existed a significant positive relationship between the two variables. He, however, highlighted that there existed a special negative relationship between the variables for the companies in the finance and investments sectors.

Mbuki (2010) studied the determinants dividend payments and how they affect the dividend Payout Ratio among Saccos in Kenya. Amongst his findings were that firms pay dividends because they lack investment opportunities, have available cash to pay dividends and the sustainability of the dividend payment in the future. The findings are consistent with the findings of Erick (2010) to the extent that availability of investment opportunities and liquidity position affect dividend payments. Further, Mbuki (2010) points out that dividend announcements impact stock prices and the firm has a greater possibility of doing much better in future and hence better dividend payments be made in future to the shareholders.

In his study relationship between shareholders dispersion, firm size and dividend policy, Mutiso (2011) established that firms with low capitalization reinvested most of its earnings rather than pay dividends to shareholders. This implies than firms with high capitalization retain less earnings and are likely to pay relatively higher dividends provided there are +NPV projects that require capital.

Murekefu and Ouma (2012) studied the relationship between dividend payout and the performance of firms listed at the NSE between 2002 and 2010. The study found that the firm's performance is majorly affected by the firm's dividend payout and real earnings, otherwise called cash dividends, are preferred by investors than capital gains. The study therefore supports the bird-in-hand theory of dividends.

Kalama (2013) studied the relationship between earnings and share prices for companies listed at the NSE and coincidentally established that earnings and dividends are among the strongest predictors of share price. In this sense, he called for the need of investors to make investment decisions that maximize their returns and at the same time, the company managers make decisions that enhance earnings and recommended a liberal dividend

policy and the need for companies to pay regular dividends. In maximizing returns and paying regular dividends, the share price takes a positive trajectory which is a price of concern for shareholders.

Ongeri (2014) studied the determinants of dividend payout for companies listed at the NSE and found out that earnings, liquidity, company size and profitability are significant determinants of dividend policy. Abu (2012) carried out the same research in Bangladesh and found out that net income is the most significant determinant with liquidity and retained earnings affecting dividend payments to a lesser extent, whereas sales/revenue and price earnings ratio had no effect on dividend payout.

2.5 Summary

The question as to whether a company will translate all its earnings/profits into dividends is a complicated one and specific to the company as ever and no consensus has been reached by scholars, researchers and philosophers alike. Black (1976) in his study on the dividend puzzle concluded with the following question: “What should the corporation do about dividend policy? We don’t know”.

Various researches and studies have been done to establish the determinants of dividend payments and the determinants have been found to include the firm’s liquidity, earnings, leverage, profitable opportunities, and debt equity ratio, past dividend history, ownership structure, and firm size, among others. With earnings as a determinant, Muindi (2006) established that there existed a negative relationship between EPS and DPS whereas Baker and Powell (2000) found a strong positive relationship between the firm’s financial performance and dividend payments in the financial sectors. As pointed out, Ebrahimi and Areezo (2011) concluded that in some years of their research period, shareholders paid special attention to the firms’ current earnings and dividends, and in other years of study,

there was not a significant relationship between these variables as Musa (2009) confirmed a strong positive relationship between earnings and dividends. These contradicting and indefinite findings point to the puzzle that still exists between earnings and dividends hence the need for further evaluation and inclusion of other suggested determinants of dividend policy. In fact, Black (1976) wrote, ‘the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don’t fit together.’

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter captures the steps that were followed in studying the effect of earnings on dividends, and also the effects of other proposed determinants of dividend policy on dividend payments. It covers the research design used for analysis, the sample population and the sample size and the data collection method. It also states the analysis model highlighting the relevant components in the model.

3.2 Research Design

This study adopted a correlation research design to establish the relationship between DPS and EPS and the other independent variables in the model. A correlation research is a study that attempts to discover or establish the existence of relationships / interdependence between two or more aspects of a situation (Kothari, 1985).

3.3 Target Population of Study and the Sample Size

The population of this study comprised of 64 companies listed at the NSE as at December, 31 2014. The sample size was all the 64 companies listed at the NSE but data for only 38 firms was available. The study covered a 10-year period during the year 2005 to 2014 and the selection of this period was based on the latest period of available data and to enable findings reflect as current dividend-payment practices as possible as adopted by the firms listed at the NSE.

3.4 Data Collection

The analysis of the study was based on secondary data collected from the NSE handbook for years 2005-2014. Data was also obtained from the financial statements from the

respective companies and the CMA database was also used to collect the relevant data of the respective companies under study. The relevant data for analysis were the EPS, DPS, the firm's cash and bank balances, its long term loan obligations and the retained earnings for the year, all of which are computed in or derived from the financial statements.

3.5 Data Analysis

The data analysis involved the use of a multiple regression model given that various variables were adopted as independent variables. Data analysis was done using the computer software, Stata version 12, to run the regression model. The regression model used is:

$$Y = A + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

Where Y is the DPS, A is a constant, X₁ is the EPS, whereas X₂, X₃ and X₄ represent ratios of the firm's long-term loan obligations(leverage), the firm's cash and bank balances (liquidity) and the firm's retained earnings for the year respectively, B_i are the coefficient of X₁, X₂, X₃ and X₄. Based on the literature reviewed, the firms' leverage, liquidity and the retained earnings for the year were shown to be major determinants of dividend payments by various researchers and scholars including Miller and Modigliani (1961), Fama and French (2001), Kania and Bacon (2005), Gupta and Banga (2010) and Erick (2010) and were, therefore, used as control variables. The quantitative data collected was condensed to obtain descriptive statistics like the mean for analysis.

Correlation analysis was used to describe the degree to which one variable is related to the other given that the analysis allowed for relationships between variables to be established. In this study, the coefficient of correlation (r) was estimated to determine the nature/direction and magnitude/strength of the relationship between DPS and the four

independent variables. In addition, the coefficient of determination (r^2) was used to determine the proportion of the variance of DPS that is predictable from the independent variables. It is a measure that allowed us to determine how certain one can be in making predictions from a certain model as it represents the percent of the data that is closest to the line of best fit. The significance of the relationship between DPS and EPS was tested at a confidence level of 95%.

For interpretation, the regression coefficients B_i were indicated if there existed a relationship between DPS and the independent variables in the model. A correlation coefficient of any value but zero indicates existence of a relationship whereas a zero coefficient indicates no relationship. A positive sign on the regression coefficient indicates that an increase in the respective independent variable results in an increase in the independent variable whereas a negative sign indicates that a decrease in the respective independent variable results in a decrease in the independent variable. In measuring the percent of the data that is closest to the line of best fit, the coefficient of determination ranges between +1 and -1. When the coefficient is between 0.5 and 1, there is a strong positive relationship and a strong negative relationship when the coefficient is between -0.5 and -1. If it is between 0 and 0.5, there is a weak positive relationship between DPS and the independent variables and a weak negative relationship when the coefficient is between 0 and -0.5.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.1 Introduction

This chapter presents the results of data analysis. The study had targeted all the listed firms for the period 2005-2014. However, some of the firms were listed within the period and, therefore, did not have the whole data for the period. Thus, the final analysis used 38 firms down from 64. This represents 59% of the listed companies in Kenya. The chapter first presents the univariate analysis results followed by the multivariate analysis results. Finally, a discussion of findings is presented.

4.2 Descriptive Statistics

Table 4.1 shows the descriptive results for all the 38 companies listed on the NSE whose data was available based on the variables in the study. The results show that the mean DPS was Sh. 2.9 while the mean EPS was Sh. 8.1. Leverage of the market averaged 1.46 for the period while liquidity averaged 1.84. The average retained earnings was Sh. 1.7 million.

Table 4.1: Descriptive results of the market

Variable	Obs	Mean	Std. Dev.
DPS	38	2.91	4.51
EPS	38	8.12	11.86
LEVERAGE	38	1.46	1.89
LIQUIDITY	38	1.84	2.29
RETAINED EARNINGS	38	1,66	3,068,293

Table 4.2 shows the descriptive results by industries. The results show that the industry with the highest DPS was banking (Sh. 3.38) while the lowest was automobiles and accessories (Sh. 0.38). On EPS, the industry with the highest EPS was construction (Sh.

14.91) while the lowest was automobiles and accessories (Sh. 2.45). Thus, the automobiles and accessories industry recorded both the lowest DPS and EPS. The average DPS and EPS stood at Sh. 2.91 and Sh. 8.12 respectively.

Table 4.2: Mean of variables by industry

Industry	DPS	EPS	LEVERAGE	LIQUIDITY	RETAINED EARNINGS
Agriculture	2.31	11.15	1.24	4.84	156,531
Automobiles and Accessories	0.38	2.45	0.23	1.64	308,915
Banking	3.38	7.11	3.84	0.00	2,632,287
Commercial and Services	1.95	3.38	1.89	1.17	748,235
Construction	2.72	14.91	0.66	2.27	1,273,178
Energy and Petroleum	1.15	5.86	0.31	1.19	859,192
Insurance	2.85	8.37	0.15	0.00	1,010,909
Investment	0.78	3.62	0.15	1.30	2,472,992
Manufacturing and Allied	7.25	9.48	0.34	1.79	4,456,472
Total	2.91	8.12	1.46	1.84	1,661,723

4.3 Diagnostic and Correlation Analysis

As was described in chapter 3, the diagnostic analysis to test the normalcy of data distribution for the OLS regression in this study involved testing for multicollinearity as was tested using correlation analysis. Table 4.3 shows the results of the correlation analysis. This was done in order to test for multicollinearity between the independent variables. The results show that none of the correlations between the independent variables were significantly higher. Thus, there was no multicollinearity between the independent variables and, therefore, the OLS regression could be carried out.

Table 4.3: Correlation matrix

Variables	DPS	EPS	LEVERAGE	LIQUIDITY	RETAINED EARNINGS
DPS	1				
EPS	0.5235	1			
LEVERAGE	0.0095	0.1488	1		
LIQUIDITY	-0.0283	-0.0594	-0.3479	1	
RETAINED EARNINGS	0.0627	-0.0457	0.0699	-0.1557	1
INDUSTRY	0.2424	0.0019	-0.3129	-0.2601	0.3367

Table 4.4 shows the summary descriptive results. As shown, normality is tested using kurtosis and skewness. Both kurtosis and skewness results show that some of the variables were not normally distributed. Thus, in the final regression, retained earnings was adjusted using the natural logarithms.

Table 4.4: Summary descriptive statistics

	<i>DPS</i>	<i>EPS</i>	<i>LEV</i>	<i>LIQ</i>	<i>RE</i>
Mean	2.909868	8.1175	1.464203	2.129744	1661723
Standard Error	0.732267	1.923314	0.307081	0.346124	497742.9
Median	1.325	4.725	0.317718	1.500687	390167.8
Standard Deviation	4.513997	11.85611	1.892976	2.13365	3068293
Kurtosis	14.65726	6.360352	1.166408	15.66487	8.22223
Skewness	3.397947	2.412778	1.351012	3.556935	2.776638
Count	38	38	38	38	38

4.4 Earnings per share and Dividends per share

Table 4.4 shows the results of the regression analysis. The results of five models are presented. The dependent variable was DPS. In Model 1, the effect of EPS on DPS is tested directly. The results show a positive and significant effect of EPS on DPS. In Model 2, the relationship is tested with the inclusion of one control variable, leverage, and the results show that EPS has a positive and significant effect on DPS. In fact, there is an improvement with the inclusion of leverage in Model 2 as the coefficient increases from 0.199 to 0.203 and the R^2 also increases by 5%. In Model 3, leverage and liquidity are included in the model but the results remain similar to those in Model 2. This means that liquidity does not improve the model. In Model 4, retained earnings (which is included after taking the natural logarithm of the values) is added to the model and the results show an improvement in the effect of EPS on DPS from a coefficient of 0.203 to 0.807 and the R^2 value also rises to 85% from 27% in Model 3. Lastly, Model 5 includes industry

dummy in the analysis and the effect of EPS on DPS drops to a coefficient of 0.770. However, R^2 rises to 86.4% from 85% in Model 4. This suggests a marked improvement in the explanatory power of the model. Notably, all other variables do not significantly influence DPS in any of the models used. The model thus becomes:

$$\text{DPS} = 5.795 + 0.807 \text{ EPS} - 0.555 \text{ LEV} + 0.258 \text{ LIQ} - 0.505 \text{ Ln(RE)}$$

Table 4.5: Effect of EPS on DPS

VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5
EPS	0.199*** (0.0541)	0.203*** (0.0553)	0.203*** (0.0561)	0.807*** (0.084)	0.770*** (0.087)
Leverage		-0.167 (0.346)	-0.187 (0.374)	-0.555 (0.413)	-0.765 (0.545)
Liquidity			-0.0468 (0.306)	0.258 (0.226)	0.330 (0.229)
LnRE				-0.505 (0.460)	-0.957 (0.568)
Industry dummy					0.395 (0.301)
Constant	1.292 (0.770)	1.504 (0.894)	1.620 (1.179)	5.795 (6.536)	9.924 (7.139)
Observations	38	38	38	22	22
R-squared	0.274	0.279	0.279	0.850	0.864
F-statistic	13.59***	6.77***	4.39**	24.0***	20.35***

Standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The study examined the relationship between EPS and DPS. The results show a positive effect of EPS on DPS for all the models used in the study. The results are consistent with a number of studies. For instance, the results are consistent with Muindi (2006) who found a positive relationship between EPS and DPS for listed firms in Kenya between 2000 and 2004. The findings by Ranti (2013) were consistent with the findings by Murekefu and Ouma (2012) who established that the firm's dividend payout is majorly affected by the firm's performance for the period, and that real earnings are preferred by investors than

capital gains. It is, therefore, worth noting that these findings support the bird-in-hand theory of dividends and disapproves the realness of the dividend-irrelevance theory as put forth by Miller and Modigliani (1961).

The study found that leverage did not have a significant effect on DPS. However, the sign was negative in the models consistent with Ranti (2013) who found an inverse relationship between financial leverage and the dividend policy decisions of listed firms in Nigeria and the study by Gupta and Banga (2010). Therefore, while no significant relationship was found in this study, the inverse relationship was confirmed.

The study found a negative but insignificant effect of liquidity on DPS in Model 3 and positive but insignificant effects in Model 4 and 5. Relying on Models 4 and 5, these results are consistent with most studies which have found positive effects of liquidity on DPS such as Ongeru (2014) but such have found a significant relationship.

The study also found a negative but insignificant effect of retained earnings on DPS. This is inconsistent with the findings of Abu (2012) who found a significant effect of retained earnings on DPS. However, others such as Anil and Kapoor (2008) using other measures of sales as growth have also found non-significant effects of retained earnings on DPS.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions, recommendations and suggestions for further research.

5.2 Summary of Findings

The purpose of this study was to examine the effect of earnings per share on dividends per share. In order to do this, the study targeted 64 listed companies in Kenya for the period 2005 to 2014. However, not all the firms had the data for the entire period and only 38 firms were finally used in the study. These make up 59% of the listed firms in Kenya. Secondary data was collected on EPS, DPS, retained earnings, leverage and liquidity. The analysis was done using descriptive analysis and regression analysis.

The study found that earnings per share had a positive and significant effect on dividends per share. Thus, higher earnings are likely to lead to higher dividend payments. This is consistent with prior researches by Fama and French (2001), Kania and Bacon (2005), Musa (2009), Ranti (2013) amongst other researches and is in support of the bird-in-hand theory of dividends. Further, leverage was found out to have a negative but insignificant effect on dividends per share, hence partly confirming the findings by Gupta and Banga (2010) and Erick (2010) who established a negative but significant relationship between leverage and DPS. Liquidity was also found to have a negative but insignificant effect on DPS thereby contradicting the findings by Kania and Bacon (2005), Mbuki (2010), Erick (2010) amongst several other researchers who established that companies pay dividends if their liquidity levels are high. Retained earnings had a positive but insignificant effect on dividends per share hence confirming Higgins (1972) finding of negative relationship between DPS and retained earnings due to the need for business growth.

5.3 Conclusions

This study sought to examine the effect of earnings per share on dividend per share. The analysis revealed that dividend per share was positively influenced by earnings per share. The study concludes that dividend policy of a listed firm in Kenya is strongly influenced by earnings per share. The higher the earnings per share the higher the dividends per share. The results are consistent with Muindi (2006) who found a positive relationship between EPS and DPS for listed firms in Kenya between 2000 and 2004 except for firms in the financial sector.

The effect of leverage on dividend per share was also examined. The study revealed that dividend per share was not influenced by leverage. The study concludes that leverage does not influence dividend policy in Kenya. Thus, the level of leverage a firm has does not explain the dividends per share. These results are consistent with Ranti (2013) who found an inverse relationship between financial leverage and the dividend policy decisions of listed firms in Nigeria.

The study further examined the effect of liquidity on dividend policy. The results showed that dividend policy was not affected by liquidity of firms. The study, therefore, concludes that liquidity does not influence the dividend policy of listed firms in Kenya. No matter the level of liquidity, dividend policy will be unaffected. These results are consistent with most studies which have found positive effects of liquidity on DPS such as Onger (2014) but such have found a significant relationship.

Finally, the study examined the effect of retained earnings on the dividend policy. The study found that retained earnings did not influence dividend policy. The study concludes that dividend policy in Kenya is not influenced by retained earnings. Thus, at no level of retained earnings is dividend policy of firms in Kenya affected. This is consistent with the findings of Anil and Kapoor (2008) using other measures of sales as growth who also found non-significant effects of retained earnings on DPS.

5.4 Limitations of the Study

The study used secondary data gathered from 38 listed companies in Kenya. While this may be large enough, not all the banks were covered for some of them lacked the data. Thus, the study is limited by the number of observations.

Secondly, this study used an OLS model to examine the relationship between EPS and DPS. Thus, this study suffers from the limitations of OLS regression analysis such as model's predictive ability.

Finally, the study used three control variables. This model left out a number of variables that should have been controlled for. Therefore, the results may not fit well within other banks as some bank specific factors were left out of the model.

5.5 Recommendations

The study makes a number of recommendations. First, the study recommends that firms should focus on improving their earnings in as this will translate to a positive dividend policy. Strategies to improve firm earnings should, therefore, be the focus of firms if they need to maintain a stable dividend policy and a higher dividends per share.

Investors and analysts who are interested in investing in firms that will pay higher dividends should use the EPS as a basis for forecasting the DPS of the firms in which they seek to invest or advise their clients on where to invest.

The study also recommends that policy makers should incorporate the role of EPS in assessing the DPS of firms. As such, policies that help improve the earnings of firms should be encouraged to enhance dividend payments for listed firms as well as for other organisations.

5.6 Suggestions for Further Research

The study recommends that more studies need to be carried out in this area to examine other determinants of dividend policy other than EPS, leverage, liquidity, and retained earnings. Such studies will help improve the understanding on how dividend policies in organisations are shaped.

The study also suggests that a similar study be done using a panel data analysis technique in order to assess whether the results from such studies would give a different kind of results from the ones employing linear regression methods such as the one used in this study.

Further studies should also include more control variables in the model in order to improve the model's predictive ability and accuracy on how EPS affects DPS for commercial banks in Kenya.

REFERENCES

- Abu, S. (2012). Determinants of Dividend Pay-out Policy: Evidence from Bangladesh. *International Journal of Economic Practices and Theories*.
- Al-Kuwari, D. (2009). Determinants of the Dividend Policy in Emerging Stock exchanges: The Case of GCC Countries, *Global Economy & Financial Journal*, 2.
- Al-Malkawi, H. N. (2007). Determinants of dividend payout ratios: a study of Indian Information Technology sector. *International Resource Journal of Finance and Economics*, Vol. 15.
- Anil, K. and Kapoor, S. (2008). Determinants of corporate dividend policy in Jordan: an application of the Tobit Model. *Journal of Applied Accounting Research*, 23.
- Baker, H. K. and Powell, G. E. (2000). Determinants of corporate dividend policy: a survey of NYSE firms, *Finance and Practical Education*, 9.
- Baker, H. K., Farrelly, G. E & Edelman, R. B. (1986). Corporate dividend: Views of Policymakers: *Akron Business and Economic Review*, 17 (4), 62 – 74.
- Bhat, R. & Pandey, I. M. (2004). Dividend Behaviour of Indian Companies under Monetary Policy restrictions. *Indian Institute of management*, Ahmedabad.
- Black, F. (1976). The Dividend Puzzle. *Journal of Portfolio management*, 634–639.
- Denis, D. J. & Osobov, I. (2008). Why do Firms Pay Dividends? International Evidence on the Determinants of Dividend Policy. *Journal of Financial Economics*, 89.
- Dhameja, N. L. (1978). Corporate Dividend Behaviour with special emphasis on Growth and Controlled Companies. *Unpublished doctoral dissertation*, Indian Institute of Management, Ahmedabad, 25.
- Easton, P. D. & Harris, T. S (1961). Earnings as Explanatory Variable for Returns. *Journal of Accounting Research*.

- Ebrahimi, M. & Arezoo, A. C., (2011). The Relationship between Earnings, Dividend, stock return: Evidence from Iranian Companies. *2011 International conference on Humanities, Society and Culture*, Vol. 20. IACSIT Press, Singapore.
- Erick, K. B. (2010). Determinants of Dividend Payments by the Financial Sector Listed Companies at the Nairobi Securities Exchange. *Unpublished MBA Project*, University of Nairobi.
- Gupta, A. and Bang, C. (2010). The Determinants of Corporate Dividend Policy. *Decision*, 37,(2).
- Fama, E. F & Blahnik, H. (1968). Dividend Policy: an empirical analysis. *Journal of the American Statistical Association*.
- Fama, E. & French, K. (2001). Disappearing Dividends: Changing Firms' Characteristics or Low Propensity to Pay? *Journal of Finance Economics*, 60 (1).
- Frankfurter, M. G. & Wood, B. G. (2003). *Dividend Policy Theory and Practise*, Academic Press.
- Firer, C., Gilbert, E. & Maytham, A. (2008). *Investment Analysts Journal*, No. 68.
- Ghose, S. (2013). Study of Dividend Decision of Tata Steel in relation to EPS. *International Journal of Marketing, Financial Services & management Research*, Vol. 2, No. 7.
- Gordon, M. J. (1959). Dividends, Earnings and Stock Prices. *Review of Economics and Statistics* 41(2). The MIT Press
- Hashim, Z., Shahid, R., Sajid, I. & Umair, A (2013). Determinants of Dividend Policy: A case of Banking sector in Pakistan. *Middle-East Journal of Scientific research*, 18 (3).
- Higgins, R. C. (1972). The Corporate Dividend Saving Decision. *Journal of Finance Quant Anal*, 7, 1527-41.

- Joan, F. M., Roni, M. &Schmalz, M. (2014). *Pay-out Policy*. Michigan Ross School of Business, University of Michigan, Feb. 2014.
- John, K. and Williams, J. (1985). Dividends, Dilution, and Taxes; A signalling Equilibrium. *The Journal of finance*, 40(4) (September, 1985). Blackwell Publishing for the American Finance Association.
- Kalama, K. D. (2013). The Relationship between Earnings and Share Prices of firms listed at the Nairobi Stock Exchange. *Unpublished MBA Project*, University of Nairobi.
- Kania, S. L & Bacon, F. W. (2005). What Factors Motivate the Corporate Dividend Decision? *ASBBS E-Journal*, 1 (1), 97-107.
- Kothari, C. R. (1985). *Research Methodology – Methods and Techniques*. New Delhi, Wiley Eastern Ltd.
- Lev, B. (1989). On the Usefulness of Earnings and Earnings Research: Lessons and Directions from Two Decades of Empirical Research. *Journal of Accounting Research, Supplement 27*, 153-201.
- Lintner, J. (1956). Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes. *The American Economic Review*, May 1956, Vol. 46 (2).
- Litzenberger, R. H. &Ramawswamy, K. (1979). The Effects of Personal Taxes and Dividends on Capital Asset Prices; Theory and Empirical Evidence. *Journal of Financial Economics*, 7, 163-195.
- Mahapatra, R. P. &Sahu, P. K. (1993). A Note on Determinants of Corporate Dividend Behaviour in India: An Economic Analysis, *Decision*, 20 (1).
- Mbuki, P. (2010). The factors that determine the dividend payout ratio among SACCOs in Kenya. *Unpublished MBA project*, University of Nairobi.
- Miller, M. and Modigliani, F. (1961). Dividend Policy, Growth and the Valuation of Shares. *Journal of Business*, 34.

- Miller, M. H. and Scholes, M. S (1978). Dividends and Taxes. *Journal of Financial Economics* 6. North-Holland Publishing Company.
- Muinde, H. M. (2006). The Relationship between Earnings per share and Dividend per share of equities for companies quoted at the Nairobi Stock Exchange. *Unpublished MBA Project*, University of Nairobi.
- Munyua, P. N. (2014). Effect of Dividend Policy on Stock Prices for Firms listed at the Nairobi Stock Exchange. *Unpublished MBA Project*, University of Nairobi.
- Murekefu, M.T. & Ouma, P. (2012). The Relationship between Dividend Pay-out and Firm Performance of Firms listed at the Nairobi Stock Exchange. *European Scientific Journal*, 8 (9).
- Musa, I. F. (2009). The Dividend Policy of Firms Quoted at the Nigeria Stock Exchange: An Empirical Analysis. *African journal of Business Management*, 3 (10).
- Mutiso, F. K. (2011). Relationship between shareholders dispersion, firm size and dividend policy of firms quoted at the NSE. *Unpublished MBA project*, University of Nairobi.
- Nichols, D. C. & Wahlen, J. M. (2004). How Do Earnings relate to stock Returns? A Review of Classic accounting Research with Updated Evidence. *Accounting Horizons*. 18 (4) Pg. 263-286.
- NSE (2015, March 27). Retrieved from <http://www.nse.co.ke/listed-companies/>
- Ongeri, G. A. (2014). Determinants of Dividend Pay-out for companies listed at the Nairobi Securities Exchange. *Unpublished MBA project*, University of Nairobi.
- Oyejide, T. A. (1976). Company Dividend Policy in Nigeria: An Empirical Analysis. *Nigeria Journal of Economic Social studies*, 18 (2).
- Pruitt, S. W. & Gitman, L. W. (1991). The Interactions between the Investment, financing and Dividend Decisions of major US firms. *Financial Review*, 26(33).

- Ranti, U. O. (2013). Determinants of Dividend Policy: a study of selected listed firms in Nigeria. *Change & Leadership Journal*, No.17-2013.
- Rozeff, M. S. (1982). Growth, Beta and Agency costs as Determinants of Dividend Payout ratios. *The Journal of Financial Research*, 5 (3).
- Skinner, D. J. (2006). *The Evolving Relation between Earnings, Dividends, and Stock Repurchases*. Graduate School of Business, University of Chicago, May 2006.
- Sujata, K. (2009). *Impact of Dividend Policy on Shareholders' Value: A study of Indian Firms*, Jaypee Institute of Information Technology, Noida, Dec. 2009.
- Waweru, M. K., Ganesh, P. P. & Mwaura, M. F. (2012). The Signalling Hypothesis: Evidence from the Nairobi Securities Exchange. *Journal of Business Studies Quarterly*, 3(4).

APPENDICES

Appendix 1: List of Companies Listed at the NSE

Retrieved from <http://www.nse.co.ke/listed-companies/>, 2015, March 27.

Agriculture

1. Kakuzi
2. Rea Vipingo Plantations Ltd
3. Sasini Ltd
4. Eaagads Ltd
5. Kapchorua Tea Co. Ltd
6. Limuru Tea Co. Ltd
7. Williamson Tea Kenya Ltd

Automobile and Accessories

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

Banking

1. Barclays Bank Ltd
2. CFC Stanbic Holding Ltd
3. I & M Holdings Ltd
4. Diamond Trust Bank Kenya Ltd
5. Housing Finance Co. Ltd
6. Kenya Commercial Bank Ltd
7. National Bank of Kenya Ltd
8. NIC Bank Ltd
9. Standard Chartered Bank Ltd
10. Equity Bank Ltd
11. The Co-operative Bank of Kenya Ltd

Commercial & services

1. Express Ltd
2. Kenya Airways Ltd
3. Nation Media Group
4. Standard Group Ltd
5. TPS Eastern Africa (Serena) Ltd
6. Scangroup Ltd
7. Uchumi Supermarket
8. Hutchings Biemer Ltd
9. Longhorn Kenya Ltd
10. Atlas Development & Support Services

Construction and Allied

1. Athi River Mining
2. Bamburi Cement
3. Crown Berger Ltd
4. E.A. Cables Ltd
5. E.A. Portland Cement Ltd

Energy and Petroleum

1. KenolKobil Ltd
2. Total Kenya Ltd
3. KenGen Ltd
4. Kenya Power & Lighting Co. Ltd
5. Umeme Ltd

Insurance

1. Jubilee Holdings Ltd
2. Pan Africa Insurance Holdings Ltd
3. Kenya reinsurance Corporation Ltd
4. Liberty Kenya Holdings Ltd
5. British American Investment Co. (K) Ltd
6. CIC Insurance Group Ltd

Investment

1. Olympia Capital Holdings Ltd
2. Centum Investment Co. Ltd
3. Trans-Century Ltd
4. Home Afrika Ltd
5. Kurwitu Ventures Ltd
6. Nairobi Securities Exchange Ltd

Manufacturing and Allied

1. A.Baumann& Co. Ltd
2. B.O.C. Kenya
3. British American Tobacco Kenya
4. Carbacid Investments
5. East African Breweries
6. Eveready E.A.
7. Kenya Orchards
8. Mumias Sugar Co. Ltd
9. Unga Group
10. Flame Tree Group Holdings

Telecommunication and Technology

1. Safaricom Ltd

Appendix 2: Data for Variables in the Study

Company	Industry	DPS	EPS	LEV	LIQ	RE
Eaagads	Agricultural	-	-0.5	0.21	6.37	83515.00
Kapchorua	Agricultural	6.25	26.31	3.78	2.14	-
Kakuzi	Agricultural	-	2.33	0.28	4.24	-
Limuru	Agricultural	3.13	-1.96	0.3	12.58	97592.00
Rea Vipingo	Agricultural	0.4	4.72	0.01	3.39	914609.00
Sasini	Agricultural	0.13	-5.09	0.23	1.88	-
Williamson	Agricultural	6.25	52.22	3.86	3.28	-
Car and General	Automobiles	0.74	8.77	0.12	1.22	-
Sameer	Automobiles	0.4	1.09	0.24	2.77	867544.00
Marshalls	Automobiles	-	-2.53	0.33	0.94	59203.00
Barclays	Banking	7.35	1.91	3.46	0.5	-
CFC	Banking	1.5	8.26	4.34	0.44	-
Diamond	Banking	1.4	11.99	4.58	1.24	7738795.00
Housing Finance	Banking	0.88	2.41	3.73	1.6	1153750.00
KCB	Banking	3	5.73	3.5	2.7	-
NBK	Banking	0.17	2.66	4.55	0.9	-
NIC	Banking	1.75	4.73	3.28	0.7	10010641.00
Standard Chartered	Banking	11	19.22	3.3	1.5	2155114.00
Express	Commercial	-	0.85	0.39	0.62	-
Kenya Airways	Commercial	0.63	0.64	7.5	0.7	-
Nation Media Group	Commercial	8	11.72	0.01	2.29	1296132.00
Standard Group	Commercial	0.25	1.72	0.94	1.11	682744.00
TPS	Commercial	0.88	1.99	0.6	1.15	1762301.00
Athi River Mining	Construction	0.68	2.44	1.52	1.49	3213953.00
Bamburi	Construction	3.65	7.72	0.19	4.64	2461000.00
Crown	Construction	5.01	45.23	0.06	1.49	-
EA Cables	Construction	3	5.95	0.11	1.54	690937.00
EAPC	Construction	1.25	13.24	1.42	2.2	-
Total Kenya	Energy	1.55	2.58	0.04	1.29	1718385.00
KPLC	Energy	0.75	9.14	0.59	1.09	-
Pan Africa	Insurance	2.85	8.37	0.15	1.4	1010909.00
Olympia	Investment	0.05	2.28	0.12	2.11	-
Centum	Investment	1.5	4.96	0.18	0.49	4945983.00
BOC	Manufacturing	5.35	10.5	0.02	2.61	1103706.00
BAT	Manufacturing	24.75	25.53	0.15	1.38	1709854.00
EABL	Manufacturing	5	8.04	1.23	1.92	14282235.00
Mumias	Manufacturing	0.75	0.72	0.26	1.56	5186568.00
Unga	Manufacturing	0.38	2.62	0.05	1.5	-