

**FACTORS INFLUENCING DIVIDEND PAYOUT DECISION OF FINANCIAL AND
NON-FINANCIAL COMPANIES LISTED ON NAIROBI SECURITIES EXCHANGE**

By

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
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DECLARATION

I declare that this dissertation is my original work and that it has not been previously published or submitted elsewhere for award a degree.I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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I do hereby confirm that I have examined the master's dissertation of Samuel Thuo Gakumo and have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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ABSTRACT

Corporate dividend payout policy is among the most contested topics in corporate finance. The question of why firms make decisions to pay or not to pay dividends remains an open topic. The reason of this study was to examine the factors influencing dividend payout decision of financial and non-financial companies listed on Nairobi Securities Exchange. Specifically, it looked to establish how financial leverage, business risk, business growth rate, profitability, earning per share (EPS), financial sector dummy and the moderating effect of firm size impact dividend payout decision of financial and non-financial companies listed on Nairobi Securities Exchange. The study adopted a descriptive research design. The study conducted a census on 9 financial and 24 non-financial firms listed on the NSE consistently since 2003 to 2012. Panel data was analyzed using Probit and Tobit random effects models. The findings indicated that four variables; EPS and profitability plays a key role in positively determining the amount of dividend to pay while financial leverage and business risk play a key role in negatively determining the amount to pay. Based on the findings, the study concluded that EPS, financial leverage, and business risk play a key role in making the decision to pay or not to pay dividends. Earnings per share influence the decision to pay positively while both financial leverage and business risk influences the decision to pay dividends negatively. The findings also indicated that business growth rate, the moderating effect of size and financial sector have an insignificant relationship with the amount of dividend paid. The study recommended that both current and potential investors who are predicting future dividends to be paid should take note of the firm's financial leverage, business risk, profitability and EPS. They should expect a decision of not being paid dividends when the firm's have high business risk and financial leverage and expect a decision of being paid dividends when the firm's have high EPS. Investors should not rely on profitability when predicting the decision to pay dividends. Another recommendation made by the study is that managers should incorporate policies to pay low amounts of dividends when their firms have high leverage and business risk and pay more dividends when profitability and EPS are high. However, they should not necessarily consider business growth rate in paying dividends.

Keywords: Dividend payout policy, Probit and Tobit model, NSE

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DEDICATION

This dissertation is dedicated to my wife Juliet Gitari and my son Jayden Gakumo, who made my vision to come true. May this research work inspire you all to achieve greater in life. I also dedicate it to the School of Graduate Studies and Research KCA University for being a sturdy pillar throughout my course. I have been humbled deeply by the knowledge acquired and support accorded to me during my studies at the University.

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ACRONYMS AND ABBREVIATIONS

NSE Nairobi Security Exchange

ETS Electronic Trading System

NASI NSE All Share Index

EPS Earning per share

ROA Return on Assets

VIF Variance inflation function

TERMS AND DEFINITIONS

Financial leverage is the use of debt to acquire additional assets. It is also known as trading on equity.

Business risk is the indicator of uncertainty of the direct relationship between current and expected future profits.

Business growth rate refers to the amount of increase that the sales have gained within a specific period and context.

Profitability shows the earnings before interest and taxes

Earning per share shows the ratio of net earnings after tax to the number of shares.

Dividend policy is a company's approach to distributing profits back to its owners or stockholders.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

One of the vital components of corporate policy is examining dividend payout decisions. The dividend policy of a company determines the division of earnings between payments to stockholders and reinvestments in the firm. Finance manager's task is to allocate the earnings to dividends or retained earnings. Retained earnings are one of the most significant sources of funds for financing corporate growth. The latter makes it eventually possible to get more dividends. The topic of dividend payout has been of concern to financial managers and every firm at large. Firms face the dilemma of sharing dividend to stockholders and retaining their earnings with the aim of reinvesting it back into the business to enhance further growth. The decision of any firm regarding how much earnings they could pay out as a dividend and how much they could retain is the concern of dividend payout decisions. (Lease et al., 2000)

Dividend payment pattern impact among other things company's stock price and reputation (Malik, Gul and Rehman, 2013). Paying out more cash dividends tends to increase the price of the stock. However, increasing cash dividends means that less money is available for reinvestment and reinvesting back fewer earnings into the business will lower the expected growth rate and invariably depress the price of the stock. The firm must, therefore, be very careful in deciding the allocation of earnings to these two objectives.

Theoretically, corporate dividend payout is known to be a function of many factors. The said factors are not only internal but also external. Among internal factors is liquidity position, repayment of debt, reinvestment opportunities, stability of earnings and profitability of operations as well as the need for ownership control. The external factors include legal considerations, access to capital markets, cost-of-debts and change in technology (Weston

and Brigham, 2001; Van Horne, 2002). The interplay of these factors remains a vital issue in the distribution of corporate earnings after-tax between retained earnings and dividends.

Dividend payout stipulates the proportion of earnings that a company pays out in cash to the shareholders. A business distributing a high proportion of its earnings as a dividend may reduce the amount of earnings retained in the firm thus affecting the total amount of internal financing. It can do this while pleasing the investors who prefer cash dividends. On the other hand, a company may adopt a low dividend payout policy, which though providing retained earnings finance, may send the wrong signal to the investors. The investors then interpret a low dividend payout as a sign of little management confidence in the company's future prospects (Pandey, 2010).

The essential aspect of dividend payout is to determine the amount of earnings the company should distribute to shareholders and the amount it should remain in the firm. Retained earnings are the most needed internal sources of financing the corporation's growth (Barclay, Smith and Watts, 2005). On the other hand, one may consider dividends desirable from a shareholders point of view as they tend to increase current returns. The term dividend, when used by itself, is understood to mean a distribution of cash by the company to its shareholders (Farida, 2003). The company may distribute dividends in many other forms including property, which are in terms of physical assets of the corporation, and stock dividends, which is the payment of additional stock to current shareholders. This research will focus on cash dividends since investors perceive dividends in terms of a cash return on their stock and are also the most common form of dividends.

In essence, the dividends payout decision has a direct impact on the company's financing options and the investors' perceptions of the company's prospects. The firm should give all critical factors consideration before setting a dividend payout. A company has to establish a balance between its interests and that of investors (Kuria, 2012).

1.1.1 Nairobi securities exchange

Nairobi Securities Exchange (NSE) began as a voluntary association of stockbrokers in 1954, under the Societies Act. It has undergone numerous changes since then to be where it is currently. In 2006, it automated trading and in the following year, stock brokers were able to trade from their offices. In the year 2011, the Nairobi Stock Exchange changed this name given at commencement to Nairobi Securities Exchange. This move was one of its strategies to be full-service securities exchange that supports trading, clearing and settlement of equities, derivatives, debt and other associated instruments. It conducts its business every day from 9.am to 3 pm. It has the sole mandate of listing companies.

The Nairobi Security Exchange (NSE) primary role is to engage in securities exchanges. Trading at the NSE is via the Electronic Trading System (ETS). The NSE uses indices to measure performance (NSE, 2013). NSE provides a non-bank source of financing to enterprises by selling shares to the public. It provides not only the substitution but also diversification of risk to entrepreneurs as they raise capital through equity. The NSE is an alternative source of funds for the government and local authorities, in addition to tax collections, from which they finance development projects. They raise capital for different types of projects through the issue of bonds to the public. NSE boosts the broader ownership of companies. The opportunity rendered to the general public to have ownership rights over the listed enterprises helps reduce enormous income inequalities through the sharing of profits made by these businesses. In turn, it facilitates the redistribution of wealth. Investors get the opportunity to buy the number of securities afforded to them, and hence it enhances the small investors' source of extra income (NSE, 2013).

The firms listed on NSE fall into these categories:

Agricultural, Banking, Insurance, Automobile and Accessories, Construction and Allied, Commercial and Services, Energy and Petroleum, Investments, Manufacturing and Allied, Telecommunication and Technology and Growth Enterprise Market Segment.

This study has regrouped the firms into two major groups' namely financial and non-financial firms. The regrouping is because the regulations involved in operations of financial firms are different from those that govern the operation of non-financial firms. Banking Acts and Insurance Acts regulate the financial institutions while the Company Law Act comprises the primary regulation of non-financial institutions. The Central Bank of Kenya (CBK) licenses, supervises and regulates as mandated under the Banking Act (Cap 488). The Insurance Regulatory Authority, which came into being under the Insurance Act 2013(Revised), supervises and regulates the insurance companies. The Companies Act 2009(Revised) governs the non-financial firms. The study hence seeks to find out the influence of financial sector dummy on dividend payout decisions of companies by virtue of being in different industry segments.

1.2 Problem Statement

Corporate dividend payout policy has been an issue of interest in the financial literature for a long time. The topic remains an open subject despite vast research on it. Dividend policy has remained to be a controversial topic ever since the work of Lintner (1956) followed by Modigliani (1961) who stated that there is no policy which can increase the shareholders wealth in perfect capital markets and that dividend policies are all equivalent. Because of this Modigliani (1961) view, dividend policy has become one of the most debated topics in many academics as well as corporate finance. According to Baker, Gary and Theodore (2002) academics have tried to find the missing pieces in the dividend puzzle for more than half a century and Frankfurter et al. (2002) agrees that forty years have been spent researching dividend policy with no resolution.

The concept of Dividends is not new and in hundreds of years, it has been a standard procedure for most businesses to pay shareholders. Ciaccia (2012) however notes that some of the companies like Apple and Google which recorded the greatest success during the last years chose not to pay dividends. This is a dilemma that raises questions concerning dividends payout. A possible question arising is, if it is possible to be successful without paying dividends, so why do firms make decisions to pay or not to pay dividends?

Much of the studies conducted on dividend policy have concentrated on developed economies of North America and Western Europe. Studies on dividend policy of listed firms in African securities have become pertinent since there is growing investments in the continent. A well-regulated stock market is a vehicle for economic development, and should have a spin-off effect on the dividend policy of public companies. The availability of discrepancy in the dividend policy in African firms and their impact on the overall economic activities and growth has not gone unnoticed. Studies focusing on various implications of dividend policy in developing economies, particularly in Africa have been conducted in the recent past. For example studies by Vaivazian, Booth and Sean (2003), Nnadi and Akomi (2008) and Asamoah (2010). Despite that, many more studies are needed. Since many studies have mainly concentrated on developed economies, more studies need to be conducted in developing economies to bring out more insights into the topic.

This paper, therefore, sought to examine the factors influencing dividend payout decisions of 33 financial and non-financial firms. These firms have been on the Nairobi Securities Exchange listing between 2003 and 2012 in Kenya, a country that is among the developing economies. The study investigated the influence of various factors on dividend payout decision of firms listed at Nairobi Securities Exchange. The said factors are financial leverage, business risk, business growth rate, profitability, Earning per share, financial sector dummy and size of the firm.

The study used seven objectives because previous studies have not combined all the seven in one study. For example, the study by Nnadi and Akomi (2008) used four objectives namely market capitalization, age and growth of firms and profitability. The study by Asamoah (2010) used one objective namely, a company's share prices. This study sought to answer the question: "What are the factors influencing dividend payout decision of financial and non-financial companies listed on Nairobi Securities Exchange?"

1.3 Objective of the Study.

The core objective was to investigate the factors influencing dividend payout decision of financial and non-financial companies listed on Nairobi Securities Exchange.

1.3.1 Specific objectives of study

To:

1. Establish the influence of financial leverage on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.
2. Determine the effect of business risk on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.
3. Investigate the influence of business growth rate on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.
4. Determine the influence of Profitability on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.
5. Establish the influence of Earning per share (EPS) on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.
6. Determine the influence of financial sector dummy on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.

7. Investigate the moderating impact of firm size on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange.

1.4 Research Questions

In the light of the preceding objectives, this research sought to answer the following questions:

1. How does financial leverage influence dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange?
2. Does business risk impact dividend payout decision of the financial and non-financial companies listed on the Nairobi Securities Exchange?
3. What is the influence of business growth rate on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange?
4. How does profitability influence the dividend payout decision of the financial and non-financial companies listed on the Nairobi Securities Exchange?
5. What is the influence of Earning per share (EPS) on dividend payout decision of financial and non-financial organizations listed on the Nairobi Securities Exchange?
6. What is the influence of financial sector dummy on dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange?
7. How does the moderating effect of the firm size influence the dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange?

1.5 Significance of the Study

The study has added literature to the body of knowledge in the finance discipline, especially in the dividends policy topic. Scholars with an interest in the subject of dividends can use the

findings of this research as a foundation for doing further research on this topic. It has added to the literature of dividend payout of developing markets. The study findings are expected to guide management of companies in the formulation of dividend payout policy. The research has highlighted factors that are critical for consideration due to their impact on firm success in terms of financing and value maximization. Management will be able to see how their dividend policies compare with those of other firms of similar size and those operating in the same industry. It will help the finance managers in deciding whether firms should be keeping retained earnings for debt settlement, future projects, and dividend payments.

This study finding is also expected to guide investors who can incorporate dividend policy in their choice of companies to invest. They will also understand the various dividend policies pursued by firms in Kenya. It will help investors to gain a better understanding of the factors influencing the dividend payouts of companies in Kenya. Hence, the findings have provided investors with valuable information that will help in making investment decisions. Other stakeholders such as lender will benefit from knowing how their financial support influences a dividend decision and investor's decision of their client. Consequently, this will enable them to design loan products that encourage borrowing by firms and securities investors. The government can also benefit from the findings of this result. They would achieve this benefit through policy formulations that can either encourage dividend payment hence get withholding taxes or enhance retention of earnings hence encourage more reinvestment and thus more employment opportunities.

1.6 Scope of the Study

The study aimed to establish the factors influencing dividend payout decision of financial and non-financial companies listed on the Nairobi Securities Exchange. The study period was from 2003 to 2012. The study took place in Kenya. The study conducted a census on all the

33 consistently listed financial and non-financial firms at the Nairobi Securities Exchange since 2003 to 2012.

1.7 Limitation of the Study

Because of voluminous data of the Nairobi Securities Exchange, the study was limited to a study period between 2003 and 2012 because it could be time-consuming to analyze all the data. Another limitation was the deliberate choice of firms that have consistently been on the NSE listing since 2003 to 2013 which was bias. However, the selection of the 33 firms provided data used for analysis of the objectives.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

A literature review serves to facilitate the acquisition of information from previous studies and records that stick out as sources of factors influencing dividend payout decision for financial and non-financial listed companies at the Nairobi Securities Exchange. The researcher scrutinized information available given dividends payout theories and specific factors.

2.1.1 The Dividend Decision vis-à-vis other Firm Decisions

A company's dividend decision comprises of investment and financing decisions. Some organizations pay small dividends because management is optimistic about its future and wish to retain earnings for expansion. In this case, the company's dividend is a by-product of its borrowing decision.

Brealey, Myers and Allen (2010) defined dividend payout as "the trade-off between retained earnings on one hand and paying out cash and issued new shares on the contrary." Miller and Modigliani (1961) caution that dividend policy should not be confused with investment policy or with any other aspects of the firm that can naturally affect market value independently of dividend policy. To avoid this kind of confusion, Miller and Modigliani (1961) chose to define policy choice narrowly within a given firm. This choice is from among alternative cash payout sequences that are consistent with a particular sequence of net cash flows for the firm.

2.1.2 Managerial considerations in dividend decision

Some factors come into play when a company establishes a dividend policy. First is financial leverage where larger and more established companies are better in accessing capital markets.

The greater the firm's ability to borrow, the greater its flexibility and ability to pay cash dividends. With ready access to debt funds, management should be less concerned with the effect that a cash dividend has on its liquidity (Van Horne, 2002).

Sales growth is also a key factor influencing dividend payout in many firms. Most companies look at the dividend payout ratios of other organizations in the industry, particularly those having the same sales growth. A company should also judge the informational effect of a dividend (Kibet, 2004). What do investors expect? A company should ask itself what information it is conveying with its present dividend payment and what it would give on a possible change in dividend payment (Helfert, 2006).

Firm size also plays a crucial role in establishing dividend payout decisions in a company. Bigger companies have a high turnover and, therefore, get it easier to declare large dividends to their shareholders (Ochola, 2005). There are other key factors considered by management in making dividend decision. They are fund needs of the firm, liquidity level of the firm, the nature of stakeholders, the attitude of the board of directors, inflation, restriction in bond or loan agreements and dividend stability.

2.2 Theoretical Overview

Different theories have been advanced explaining dividend payout vis-à-vis the value of the firm. Some of these theories argue for the relevance of dividends in firm valuation while others argue that dividends are irrelevant in firm valuation. Such theories include:

2.2.1 Dividend irrelevance theory

Miller and Modigliani (1961) advanced the dividend irrelevance theory. The argument put forward by the theory is that in ideal circumstances, the value of the firm will not be affected by the level of the firm's dividends because shareholders value is indifferent to an announcement of high or low levels of dividends.

The proponents of the theory argued that company's value depends solely upon the investment opportunities available to it and not dividends. Another argument is that, there is always the availability of funds for investment in worthwhile projects. This means that, the firm can raise sufficient capital externally and internally to fund both its investments programs and dividends for a given set of investment opportunities. The main point which the theory support is that, investment decisions should not be affected by dividend payout. Maina (2002) however states that the argument by Miller and Modigliani (1961) wont apply in a situation of induced capital market rationing because investment choices will be influenced heavily by the amount of retained earnings and in such cases dividend payout impacts directly on investment .

According to the theory, dividend payments become irrelevant for the shareholders because to pay dividends, the company has to issue new shares to raise the capital needed. The price of the stocks will drop in equal proportions to the dividend payments following the issuance of new stocks. Similarly, the decrease in stock price and the dividend payments will cancel each other out (Modigliani and Miller, 1961). The implication of the theory is that managers should spend more time managing the firm's assets. From a shareholder's point of view, irrelevance implies that they are indifferent between receiving returns as capital gains or as dividends. A greater capital gain is indicated by a lower dividend while a lower capital gain is indicated by a higher dividend and the overall return is equivalent in either case. The propositions were refuted by Miller and Modigliani (1961) who argued that the required rate of return is independent of dividend policy.

The current study was seeking to test the relationship between some factors and the firm's dividend payout decision. One of the factors is the company's profitability. The study sought to test whether there is a significant relationship between a firm's profitability and the dividend payout decision. It is probable to deduce that dividends may contribute to greater

profits if there is a strong relationship between the profit acquired and the dividend payments. Since Modigliani and Miller state that dividend does not have an impact on profits, the study will hence seek to test the relationship. Even though this research disregards the supposition that capital markets are perfect, which is an important assumption, it will still test the theory on the Kenyan NSE market.

2.2.2 *Bird in hand theory*

Lintner (1956) advanced the bird in hand theory opposing Modigliani and Miller's dividend irrelevance theory. The term "bird in hand" is an umbrella term for all studies that argue that dividends are correlated positively to the company's value. It draws from the expression that "a bird in the hand is worth more than two in the bush". In financial terms, the theory says that investors' are more willing to invest in stocks that pay current dividends than investing in stocks that hold earnings and pay dividends in the future. This is because of the high degree of uncertainty associated with capital gains and dividends paid in the future. It is easier to predict current dividends than it is to predict capital gains. The stock price depends on market forces and not the managers, and so the degree of uncertainty in it is relatively higher (Keown et.al 2007). Brigham (1968) stated that the bird in hand theory argues for the relevance of dividends in firm valuation. According to him, It argues that shareholders are risk averse and prefer certainty and to them dividend payments are more certain than capital gains.

According to Khan and Jain (2008) ,the underlying assumptions of the theory is drawn from the idea of what is available today in comparison to what may be available in the future. Means that, the further the future, the higher the uncertainty associated with capital gains and future dividends. The future capital gains may provide higher returns than the current dividends however, there is no guarantee that the investor will accumulate a higher return due to the high degree of uncertainty (Gordon, 1962). Since there is a correlation

between the length of the time and the level of risk, investors are unwilling to invest in firms where they will have to wait for a long time to receive dividend payments.

An investor would, therefore, be willing to pay a higher price for firms that pay current dividends. For companies that do not pay current dividends, the investor would use a higher discount rate to discount the earnings. The value of these enterprises should, therefore, be lower than the companies who pay current dividends (Khan and Jain, 2008).

As highlighted, the bird in hand theory is the opposing view of Modigliani and Miller's dividend irrelevance theory. It states that among other things, companies with higher profits pay higher dividends to its shareholders. In this light, therefore, this study would wish to test this supposition. Profitability is one of the factors that the study sought to test. Therefore, it explored whether it is Modigliani and Miller's dividend irrelevance theory or the bird in hand theory that best suits the financial and non-financial firms listed on the Nairobi Securities Exchange.

2.2.3 Information signaling effect theory

Stephen Ross advanced this theory in 1977 arguing that dividends are relevant and that dividend policy can be used by the management to signal some information to the market if the business is operating in an efficient market. For example, payment of high dividends by the management could indicate large projected profits in the future to maintain a high dividend level while low dividends would show that the firm expects low profits in the future hence reducing the share price of the company.

Bhattacharya (1979) put forth one of the most recognized studies regarding signaling theories which stated that dividends might serve as a signal of anticipated future cash flows. A rise in amounts of dividends indicates that the managers look forward to higher cash flows in the future. The research however grounds on the assumptions that outside investors have

imperfect information regarding the company's future cash flows and capital gains and also tax rates on dividends are higher than those of capital gains. According to Bhattacharya (1979), under these circumstances companies would choose to use dividends to send positive signals to their shareholders and outside investors by paying more dividends. This move would however be irrespective of the fact that there is a tax disadvantage for dividends.

The application of the theory in the real world has necessitated into a pool of research which has resulted into different opinions regarding the applicability of the signaling theory. A study by Asquith and Mullins (1983) for example, provided empirical evidence in favor of the signaling theory arguing that an increase in dividend payments tends to increase the shareholders wealth and that dividends also contain information that is not available in other sources of information like accounting data. Other studies, for example, Black (1976) and Pettit (1972) states that the informational role of dividends are exaggerated and that other less expensive ways of signalling the same information to shareholders can be used.

This study sought to determine whether the argument by Bhattacharya (1979) that increases in dividend payments can act as a sign of higher cash flows in the future, is practical in the NSE market. The current study, therefore, tested the relationship between companies' dividend payout ratio and various factors, and one is the growth. The study, therefore, sought to investigate whether dividends provide a signal of higher growth. Since there is no unified picture of a correlation between dividends and growth, the study will seek to examine the relationship in the Kenyan NSE market.

2.3 Dividend Payout

In general, management has to deal with two operational decisions: investment (or capital budgeting) and financing decisions. While the capital budgeting decision relates to what real assets the firm should acquire, the financing decision entails the manner in which it should

finance these assets. Bishop et al. (2000) noted that a third decision may also arise when the firm begins to generate profits. It is the question of whether a company should distribute all or a proportion of the profit it earns in the form of dividends to the shareholders, or should it plough all the profits back into the business. Apparently, in taking any course of action, managers should concentrate on the ways of maximizing the wealth of shareholders for whom they manage the firm. Managers must not only consider the questions of how much of the company's earnings are necessary for investment but also consider the possible effect of their decisions on share prices.

Ronald et al. (2000) described dividend payout as the practice adopted by managers in making dividend payout decisions. The decision details the amount of cash to a firm ought to distribute to the shareholders and what it ought to retain for further investment. It is a decision that equates how much profits the firm retains and how much it distributes to the shareholders.

Angelopoulou and Gibson (2009) define dividend policy as the implicit or explicit decision the board of directors makes regarding the amount of residual earnings (present or past) that the company should distribute to its shareholders. Dividend payout involves the decision to retain earnings for reinvestment or pay out earnings in the establishment. An optimal dividends policy is the one that can strike a balance between future growths, current dividend and maximization of the firm's share price.

Dividends can be in the form of additional shares and cash. Firms that pay dividends can use one of the following four dividend policies. Low regular dividends plus extras, this is a policy of paying a low but regular dividend plus a year-end extra in good years. Extra dividends, this is when a firm pays a supplemental dividend in a year when it does well, and excess funds are available for distribution. A firm could adopt stable, predictable dividends in cases where it pays a specific amount each year. Lastly, Weston et al. (1996) pointed out that

residual dividend policy could be employed. However, it is only possible where the dividend paid is set equal to the actual earning less the amount of retained earning required to finance the company's optimal capital budget.

2.4 Factors Influencing Dividend Payout Decisions

Several factors can influence the dividend payout of a firm. Baker and Powell (2001) enlist the size of the firm, current earning, financial leverage of the firm, financial needs of the company, ownership control, and liquidity. They added an assessment of any valuation information, the nature of stockholders, restrictions in bond or loan agreements, dividend stability, target payout ratios, inflation and attitude of the board of directors.

Many researchers have explored the relationship between dividends and factors such as liquidity, cash flow position, external financing, investment and value of the firm. Helfert (2006) concluded that most companies look at the dividend payout ratios of other firms in the industry, particularly those having the same growth rates. Weston and Brigham (2001) and Van Horne (2003) identified a company's liquidity, cash flow and ability to borrow as prime considerations in the dividend decision. Kolb and Demong (2008) introduced the issue of restrictions in bond and loan agreements. Seitz (2000) identified inflation as having an influence on the dividend payout. He suggested the possibility of making a case for companies retaining earnings to preserve the earnings power of the company with ease. Maina (2002) concluded that the firm's dividends decision is significantly affected by the investment opportunities available. However, the current study has focused on financial leverage, business risk, growth rate, profitability, earning per share (EPS), financial sector dummy and the moderating effect of firm size.

2.4.1 Financial leverage

A growing number of studies have found financial leverage negatively associated with the dividend payout. A study of U.S. corporations led to the conclusion that higher debt ratios impact dividend payout ratio negatively. It means that as the company gets high debt ratio, the higher is the financial risk and lower the dividend distribution (Jensen, Solberg & Zorn, 1992). Highly leveraged firms aim at maintaining their internal cash flow to meet obligations instead of paying a cash dividend to shareholders and protect their creditors (Agarawal & Jayraman, 1994; Al-malkawi, 2005). Adelegan (2003) concluded that dividend payment and dividend yield ratio is higher in companies with more leverage.

While high levels of leverage increase the probability of a dividend cut rather than adjusting payouts to main firms, investment plans such companies must borrow more or raise more equity financing. The inherent advantages of retaining earnings undoubtedly encourage the maximum use of this source of funds before resorting to the capital market. Thus, external funding relates to high earnings retention for enterprises with abundant investment opportunities. Similarly, the absence of external financing may relate to lower earnings retention for other firms. As such, this study summarizes that the rate of earnings retention relates positively to external financing. Therefore, the more earnings a firm retains, the lower the dividend payout ratio, and vice versa (Kinyua, 2013)

Kunga (2004) sought to examine the relationship between the determinants of dividend payout ratios in the context of a developing country. The study investigated the issue by focusing specifically on firms listed on the Nairobi Securities Exchange (NSE). The study used regression analysis involving the regression of changes in firms' ROE against the three explanatory variables of ownership structure, the size of the firm and leverage. The study found that ownership structure of firms impacted the dividend payout, especially in smaller firms owned by directors and their families. The results indicated that the companies'

ownership structure does not influence dividend policy significantly. It also concluded that financial leverage and size of the firm, other than ownership structure, handled changes in the dividend policy of the firms listed on NSE.

In another recent study, Ambuku (2014) conducted a study to establish the effect of debt financing on dividend policy of enterprises listed on the Nairobi Securities Exchange between 2009 to 2013. The study employed longitudinal research design that used quantitative secondary data from financial statements of sampled firms listed on the NSE. The study findings conclude that a negative relationship does exist. There exists a negative association between financial leverage and dividend policies employed by firms.

Firms with greater financial leverage have been found to perform better and can publish their financial statement that disseminates information on their performance that goes a long way in sensitizing investors.

2.4.2 Business risk

Business risk reflects the uncertainty of the direct relationship between current and expected future profits. Consequently, companies avoid commitments to pay high dividends such as the uncertainty about earnings increases. Thus, a negative relationship exists between business risk and dividends payment amounts.

Many studies have been conducted to determine the relationship between the riskiness of companies and the dividend payout ratio. However, the variables used to measure the risk have been different. Holder et.al (1998) used the standard deviation of the return to measure the riskiness of the stock. Another frequently used method of previous studies is to measure risk by using variance in cash flow (Amidu and Abor, 2006). The magnitude of risk of the company has a significant and negative relationship to the company's dividend payout ratio for both large and medium companies (Holder et.al, 1998).

Arumba (2014) conducted the most recent study that sought to establish the determinants of dividend payout for firms listed on the Nairobi Securities Exchange. The objective of his study was to establish the manner and extent to which company earnings, liquidity, profitability, and size determine dividend payout for firms listed on the NSE. The results consistently support the potential association between the four independent variables and the dependent variable (dividend payout) for firms listed on the NSE. Earnings, profitability and company size, had a positive correlation with dividend payout while liquidity had an adverse correlation with dividend payout.

2.4.3 Business growth rate

A firm that has high growth rate will have a greater need for external financing. Thus, it may have the motivation to establish a good reputation with stockholders through higher dividend payout. The aim here is to indemnify access to external equity that can capitalize the firm (LaPorta, Silanes, Schliefer and Vishny, 2000). The business growth rate is one of the variables among previous studies on the topic of dividend payout decisions. The conclusion from several studies is that there exist a negative correlation between the company's growth rate and the dividend payout ratio (Holder et.al 1998). The most commonly used explanation for the negative relationship between the dividend payment amounts and growth is that the growing enterprises have to finance parts of the increased investments using retained earnings. The company has to increase their external financing to keep the same dividend payout levels as before. However, since this alternative way of financing usually is relatively expensive companies, choose to decrease their dividend payouts (Holder et.al 1998).

However, the research conducted by Amidu and Abor (2006) also stated that growth in sales was found to have statistically significant and negative association with dividend payout ratios. The two authors argued that a firm used growth in sales as proxies for its future

prospects. Also, growing firms require more funds to finance that growth. Therefore, they would typically retain a greater proportion of their earnings by paying low dividends.

Jeong (2008) also supported Amidu and Abor (2006) and stated that where sales growth is expected to be adversely related to the degree of dividend smoothing in term of dividend payout. He studied 299 firms listed on Korea Stock Exchange over a twenty-six years period between 1981 and 2006. Basing his arguments on the signaling theory, he implied that firms with growth opportunities or sales growth are relatively more likely to pay dividends to convey this information to the market. He added that these firms would also have a greater need to retain a higher proportion of earnings to support their valuable investment projects to improve the company's sales growth rate.

A study was conducted by Kivale (2013) to establish the effect financial leverage and revenue growth have on the dividend policy of companies listed on the NSE between 2008 and 2012. The study analyzed forty firms out of a population of sixty firms that had been listed consistently during that period. He collected secondary data from group annual and financial reports of individual companies for five years, which constitutes a complete business cycle. The study used a multivariate regression model whereby the dividend payout was the dependent variable. The independent variables were financial leverage, return on equity, revenue growth, the size of the firm, corporate tax, current earnings, and liquidity. With regards to these findings, the study revealed that there exists an adverse relationship between financial leverage, revenue growth and dividend payout. Firms pay dividends as a sign of current and future prospects.

2.4.4 Profitability of the firm

Profits comprise of earnings before interest and taxes in year t-1. Ideally, profitability should relate positively to dividends, as higher earnings lead to more internal funds and hence

provide more room for dividends. Nacelur, Goad and Beelines (2007) investigated the determinants of dividend policy of Tunisian Stock Exchange and found that the high profitable companies with relatively more stable earnings can manage the larger cash flows. As a result, they pay relatively larger dividends.

Most previous studies have found a positive relationship between profit and the company's dividend payouts. In their investigation of dividend policy and corporate governance in Poland, Kowalewski and Oleksandr (2007) examined one hundred and ten non-financial corporations between 1998 and 2004. The result of the study revealed that corporate governance is an important determinant of dividend policy. Also, larger corporations with higher profitability but lacked good investment opportunities paid more dividends. Moreover, companies with higher debt ratios paid fewer dividends.

Al-Malkawi (2007) also examined factors that determine the corporate dividend policy in Jordan. He employed a firm-level panel that consisted of all publicly traded firms on the factors affecting dividend policy on Amman Stock Exchange between 1989 and 2000. The results suggest that the proportion of stocks held by insiders and the state significantly affected the quantity of dividends paid. The firm's age, size, and profitability seem to be determining factors of corporate dividend policy in Jordan.

Muchiri (2006) conducted a study on determinants of dividend payout: the Case of listed companies in NSE in Kenya. From the study, it was found that successful companies accord pivotal importance to four factors in determining their dividend payout policies. These factors are the current and future profitability of the company, its cash flow position, financing requirements and availability of profitable investments, in that order. The nature of the industry, the size of the company and the number of years the company had been in operation were bound not to affect a company's dividend policy significantly vis-à-vis the payout. However, organizations in the finance and investment industry rated particular

factors such as inflation and the economic growth rate higher as determinants of payout policy, as compared to companies in other industries.

2.4.5 *Earning per share (EPS)*

EPS results from the calculation of net earnings after tax divided by the number of shares. It will be used in this study because dividend has been paid earning after interest, taxes and after depreciation. Adaoglu (2000) did an empirical analysis that showed that the firms listed on Istanbul Stock Exchange followed an unstable cash dividend policy. He used the earning of the firms as the key factor in determining the amount of dividend. Arnort and Ashess (2002) investigated the correlation between the growth in dividends and revenues. They explored why the dividend payment ratio has reduced, but price/earnings per share ratio kept on increasing from 1995. Results of the research showed that lower dividend payment ratio and higher price earnings per share ratio suggest the future growth in revenues.

Jeong (2008) also found out that the Korean firms make dividend payments on the grounds of firm's stock face value that is very close to the average interest rate on deposits. The change in dividends is less likely to reflect the change in fundamentals of the firms. They find the determinants of dividend smoothing, company risk, size and growth factors play very crucial roles in clarifying the cross section of the dividend behavior and smoothing. According to Pal and Goyal (2007), the current earnings are also synonymous with profit after tax, which represent the capacity of a corporation to pay dividends. Thus, it has a positive correlation with dividends. Besides, the level of profit constitutes an invariable starting point for the management when considering whether the firm should pay or not to pay dividends in any given year.

Ndung'u (2009) conducted a study that sought to find out the determinants of dividend policy. The study used a descriptive survey on a population sample including all the

companies listed on the NSE and had traded steadily from 2004 to 2008. The study used secondary data to make an analysis of the total assets, current liabilities, current assets, common equity, net income, retained earnings and market capitalization from the books of accounts of those companies. Data analysis was through regressing the dividend payout ratio as a dependent variable against the independent variables. The latter were profitability, firm size, growth opportunity, earned equity mix and liquidity. The conclusion of the study was that profitability, liquidity, size, earnings to contributed equity mix positively influence dividend policies of firms listed on the NSE. Growth opportunity also recorded a positive influence on the dividend policy contrary to past studies and expectations.

2.4.6 Financial sector dummy

Al-Kuwari (2009) conducted a study to investigate the determinants of dividend policies for firms listed on Gulf Cooperation Council (GCC) country stock exchanges. This study used a panel data consisting of non-financial companies listed on the GCC countries stock exchanges between the 1999 and 2003. He investigated seven hypotheses about agency cost theory using a succession of random effects Tobit models. The latter considered the effects government ownership, firm size, free cash flow, growth opportunity, growth rate, firm profitability and business risk had on the dividend payout ratios. The results implied that the core characteristics of firm dividend payout policy among non-financial firms were that there was a strong and direct relationship between dividend payments and government ownership, firm size and profitability. On the contrary, it related negatively to the leverage ratio. These results, taken as a whole, indicate that non-financial firms pay dividends with the intention of reducing the agency problem and maintaining a firm's reputation since the legal protection for outside shareholders was limited.

Hellström and Inagambaev (2012) conducted a study among Swedish firms and separated the financial and non-financial sectors. The study found out that the four main

Swedish banks like Swedbank and Nordea suffered harshly from the crisis, but their approaches to managing the financial difficulties were entirely different. Both banks were heavily affected by the crisis and received favorable loans from the Swedish government. However, their approach to the dividend payouts to shareholders was different. Swedbank decided not to pay any dividends to its shareholders in 2009 while Nordea, which was in the same position, chose to pay dividends. The study concluded that dividend payout decisions vary even among firms in the same sector.

Hafeez and Attiya (2008) conducted a study to determine the dynamics and determinants of dividend payout policy in Pakistan. The study concentrated on non-financial companies listed on the Karachi Securities Exchange. The results consistently supported the fact that Pakistani listed non-financial companies rely on current earnings per share as well as past dividend per share to establish their dividend payments. However, the current dividends tend to be more sensitive to current earnings than the prior dividends. The listed non-financial firms have the high speed of adjustment, and the low target payout ratio shows the instability in smoothing their payment if dividends. The study also found out that the ownership concentration and market liquidity have the positive impact on dividend payout policy of these firms. Besides, the investment opportunities and leverage have a negative impact on dividend payout policy. The market capitalization and size of the firms have the impact on dividend payout policy which shows that the non-financial firms prefer to invest in their assets rather than pay dividends to their shareholders.

2.4.7 Size of the firm

Size is a moderating variable that measures the firm size. It is defined as the log of assets. Many financial economists accept the idea that there is a positive relationship between the size of the firm and dividend payout. Scott and Martin (1975) stated that firm size affect the dividend policies and firm's debt significantly. Lloyd et al. (1985) supported this argument

whereby they were among the first economists to Rozeff's model by adding "firm size" as another variable that impacts dividend payout positively. They considered it a crucial explanatory variable, considering that large companies are more likely to increase their dividend payouts to decrease agency costs.

Mori (2009) conducted a study to investigate the factors affecting dividend payout decisions among 13 different industries during the late 1960s to the mid-1970s. The study used firm size as a moderating factor and found out that it does not have a significant moderating effect. He suggests, however, that investment opportunities within industries may account partly for industry effects.

A study by Njuguna (2006) reported that firms consider four variables in determining dividend policy that include cash flow, profitability level, investment and financing opportunities available to sustain its operations. The study, however, found no significant moderating effect of size of the firm, the nature of the industry, the number of years that the firm has been in operations and dividend payout decisions.

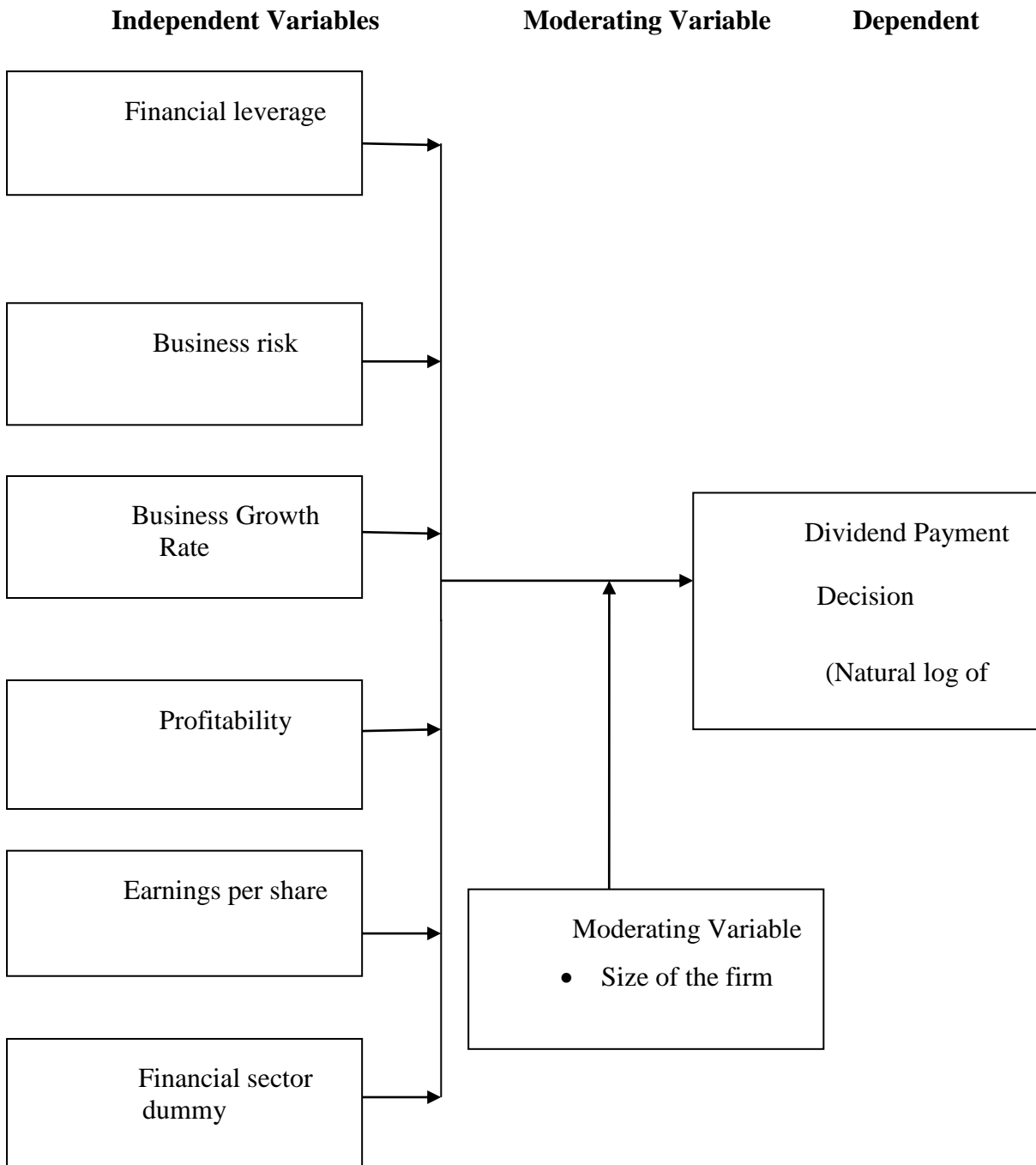
Kivale (2013) conducted a study to establish the effect of revenue growth and financial leverage on the dividend policy of corporations listed on the NSE using size as the moderating variable. The study found that a positive association exists between liquidity, return on equity, corporate tax, current earnings and dividend payout. The study also found that size of the firm influences the dividend policy. The study concluded that based on these findings, firms quoted at NSE practice signaling theory of dividend policy. Dividend acts as a sign of the current and future prospects of the performance of the firm. Firms can boost their growth, liquidity, size and profitability levels when they declare dividends since the latter commonly signifies prosperity.

2.5 Conceptual Framework

A firm's dividend payout decision depends on several factors. This study, however, focused on Earnings per share, financial leverage of the firm, profitability of the firm, business growth rate, business risk and the moderating effect of size of the firm. The study focused on these variables since the studies on dividend payout decisions in Kenya presented conceptual gaps by not researching most on them. The study also sought to use the variables as a group to investigate their collective effect on dividend payout decisions. Measurement of dividend payout was in terms of the log of the quantity of dividends paid out.

FIGURE 1

Conceptual Framework



Source: Author (2015)

2.5 Operationalization of Variables

The amount of dividend paid was measured using of the natural log of the amount of dividend paid. The natural logarithm was used to find the amount of dividend paid because it gives the amount of dividend paid as a linear function of time and gives meaningful deviations from the fitted line. It also pushes data towards normality by reducing outliers. The business risk was measured using the standard deviation of return on assets. The standard deviation of ROA indicates the variations in ROA which indicates risk. A similar study that used the standard deviation of returns is a study by Holder et.al (1998) which used the standard deviation of the return to measure the riskiness of the stock. The current study employed the following formula of standard deviation to calculate the business risk.

$$\text{Standard deviation} = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \mu)^2} \dots\dots\dots i$$

where N is the number of the values of ROA for which standard deviation is to be calculated, N is 2 for the current study because the business risk was calculated for two consecutive years while x_i is the value of ROA in year I and μ is mean of the two values of ROA. The other variables were measured as indicated in the Operationalization table.

TABLE 1**Operationalization of Variables**

Variable	Measurement
Amount of Dividend paid	Natural log of the amount of dividend paid
Dividend payout decision	Binary (1=yes and 0-No)
Business risk	Standard deviation of return on assets
Company's Growth Rate	$(\text{Sales year 1} - \text{Sales year 0}) / \text{Sales year 0}$
Size of the firm	Log of the total assets
Profitability of the firm	ROA (Return on Assets) $\text{Net income} / \text{Total Assets}$
Financial leverage	$\text{Total debt} / \text{Total assets}$
Earnings per Share (EPS)	$\text{Net earnings divided} / \text{Number of shares}$
Financial sector dummy	Dummy variable (1 =Financial sector firm,0=Non- financial sector firm)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used to collect data for the study. It covers the research design, the target population, sample, data collection instruments and procedures and data analysis methods.

3.2 Research Design

This study adopted descriptive study design. According to Upagade and Shende (2013), a descriptive study design is mainly concerned with the description of facts only. It allows the researcher to gather information, summarize, present data and interpret it for the purpose of clarification as it asks the who, what, where, when and how questions (Creswell 2003). Descriptive study design is appropriate for this study because it allows for description of the current situation involving the dividend payout decisions in the firms listed at NSE. The current situation is that firms make different decisions concerning payments of dividends and also pay different amounts of dividends based on different factors. The study sought to investigate what factors they are in trying to explain and describe the current situation of dividend payout decisions in the firms listed in NSE. The design was also appropriate because it will help answer the how questions of how the factors affect the amount of dividends paid. In that case, to understand how the dependent and independent variables are related, a descriptive study design was appropriate.

3.3 Target Population

This study targeted all the 33 financial and non-financial firms listed on the Nairobi Securities Exchange since 2003 to 2012. 33 firms were targeted because they have consistently been listed at NSE since 2003 up to 2012 without missing any year. The study did not consider the firms that were not listed at any particular year between 2003 and 2012.

Hence, the only firms that had been consistently listed were 33 which made up the study target population. The financial firms are 9, and the non-financial firms are 24.

3.4 Sample

The study conducted a census of all the 33 financial and non-financial firms listed in Nairobi Securities Exchange since the year 2003 to 2012 instead of adopting a sampling methodology. The justification here is on the basis that there are only a few firms. The companies listed since 2003 were relevant to this study because the study period spans from 2003 up to 2012 hence the firms listed after 2003 were not eligible for inclusion in the study.

3.5 Data Collection Method

This study utilized data from secondary sources. It entailed extraction of data from the annual reports and financial statements of the financial and non-financial firms listed on the Nairobi Securities Exchange for the study period. The data was from NSE Handbook for the study period. Such data included EPS, Size, profitability and financial leverage.

3.6 Panel Data Analysis

Data analysis refers to the practice in which researchers put raw data in order and organize it to extract useful information from it (Gall et al., 2007). The study conducted data analysis using two models: Random-effects probit model and Random-effects Tobit model.

3.7 Preliminaries

The study conducted preliminaries before running the inferential statistics. The preliminaries that were conducted were multicollinearity and unit root tests.

3.7.1 *Multicollinearity*

There may be a risk of multicollinearity since some of the firms' factors selected and used in the study relate to each other. Multicollinearity is a statistical condition in which the

independent variables have a high magnitude of correlation. It is not possible to see the impacts of a change in one variable while the other variables are held constant due to this interrelationship between the variables. Small changes in the data may also cause severe changes in the coefficients. Therefore, it is important to exclude possible multicollinearity from the study (Keller, 2005). The study hence tested for the existence of multicollinearity among the predictor variables using pair-wise correlation matrix before estimating the model. According to Walker and Maddan (2009), if the correlation between two independent variables exceeds 0.7, it indicates that there are problems of multicollinearity in the model.

3.7.2 Unit root test

Since the data intended for use in the study had the aspect of time, the study tested for the stationarity of the data by using Unit roots test. The existence of a unit root was tested by using Levin Lin Chu test. In case of the existence of a unit root, first differencing would be done.

3.7.3 Probit Model

The study aimed to investigate the factors that lead the firm to make the decision to pay (or not pay) dividends. A probit model was used to investigate the factors which lead to a firm making the decision to pay (or not pay) dividends. The suitable model to use to measure the directional predictability of the decision made with that kind of a dependent variable is the binary probit or a logit model proposed by Long (1997). This study used probit model because Long (1997) suggested that the coefficients from a logit model are 1.6 to 1.8 times larger than those for the probit model. The formulation of a probit model is in a typical latent (unobserved) variable framework.

The general specification of this model is as follows:

$$Y_{it} = \beta_1 X_{it} + \mu_{it} + e_{it} \quad \text{ii}$$

$$Y_{it} = \beta_0 + \sum_{i=1}^7 \beta_i X_{it} + \mu_{it} + e_{it} \quad \text{iii}$$

Where:

Y_{it} it is the continuous latent (unobserved) variable measuring firm's decision to pay (or not pay) dividends for the i th firm.

X_i is the observed explanatory variables

β_0 is Constant of the model

β_i is the coefficients of the explanatory variables

μ_{it} is the random error term that has a normal distribution with a mean of 0 and a constant variance

The latent variable Y_{it} it is linked to the observed binary variable y_{it}^* by the following measurement equation. The significance of y_{it}^* is that it is a latent variable.

$$Y_{it}^* = \begin{cases} 1 & \text{if } y_{it}^* > 0 \\ 0 & \text{if } y_{it}^* = 0 \end{cases}$$

The probit model specification for this study was:

$$Y_{it} = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \beta_6 X_{6t} + \beta_7 X_{7t} + \mu_{it} + e_{it} \quad \text{iv}$$

$$Y_{it}^* = \begin{cases} 1 & \text{if } y_{it}^* > 0 \\ 0 & \text{if } y_{it}^* = 0 \end{cases}$$

Y^*_{it} it is censored, in that; Dividend payout decision is censored to zero if there is no dividend paid and 1 if the observation has a payment:

Where:

Y = Dividend Payment decision (1, 0)

X_1 = Financial Leverage

X_2 = Business risk

X_3 = Business Growth rate

X_4 = Profitability

X_5 = Earnings per share

X_6 = Financial sector dummy variable

X_7 = Size of the firm

$\beta_1 - \beta_7$ = coefficients of independent variable

β_0 = constant.

e = Error term

The probit model used a latent variable for dividend by dividing companies into dividend payers and non-dividend payers. If a company paid dividends in a specific year, the dependent variable is 1; otherwise, it is 0, as shown above. The study adopted a probit model because the dependent variable is the binary sign return indicator. It falls into two categories namely dividend payers and non-dividend payers.

The dataset intended for this study was a panel dataset, and so a fixed-effects or random-effects probit model was appropriate to use (than the standard probit model), as these models can take into account the unobserved heterogeneity normally found in a panel dataset.

Since the estimation of a fixed-effects probit model is complex (STATA, 2006), a random-effects probit model was used. Where a firm paid a dividend amount, that indicated a binary number of 1 because the decision to pay dividend was made and where a firm did not pay a dividend amount, a binary number of 0 was used because the decision not to pay dividends was made. The two censored values indicated the decision to pay and were used as the dependent variable in running the fixed effect probit model.

3.7.4 Tobit Model

To establish whether there was a relationship between the dividends amount paid (Log of the dividend amount) and the firms selected factors, the study conducted a regression analysis. The study also aimed to establish factors that influence the amount of dividends paid. To do so, the study used a Tobit model which allows for censoring of the amount and zero amounts paid so that the results obtained in the regression are not inconsistent as a result of the zeros. According to Keller (2005), regression analysis is used to predict the value of one variable on the basis of other variables. The study applied the Tobit (1958) model that is a type of censored regression model. The Tobit model is a development of the probit model, and James Tobit created it in 1958. The main difference between the ordinary multiple regression and the Tobit regression is that the Tobit model takes censoring and truncation into consideration. Censoring refers to the case when data in the dependent variable is lost while the independent variables are not subject to any loss in data (Amemiya, 1985). Truncation refers to the case when data is lost in both the independent and dependent variable. The use of OLS estimation in the presence of censoring has been found to result in inconsistent estimates (Greene, 2003, Long, 1997).

The exclusion of the 0 amount of dividend payout ratios, if used in a multiple regression models, may create some bias and the study, therefore, applied the Tobit model. In the Tobit model, all observations with 0 dividend payout will be censored instead of being

excluded from the sample. The study applied the Tobit model with the aim to exclude any bias that may arise in the event that the research would need to use the multiple regression analysis. It adopted the Tobit model because it measures not only the probability that a firm will pay dividends but also the quantity of dividends paid. The use of Tobit has previously been applied in other studies like (Daunfeldt et.al 2009) hence this study, therefore, finds it appropriate and applicable. In cases where substantially large numbers of firms have paid the dividends, a variant of the one-limit Tobit model that is, a 2-limit Tobit proposed by Rossett and Nelson (1975), could be used. An example of a study that used the model is Gould et al. (1989). The equation for the structural Tobit model is the same as the equation applied in the multiple regression analysis:

$$Y_{it} = \beta_0 + \sum_{i=1}^7 \beta_1 X_{it} + \mu_{it} + e_{it} \quad v$$

The dependent variable (Amount of dividend paid) is censored to zero if the observation

Has zero amount of dividends paid and y^* if the observation has a payment:

$$Y_{it} = \begin{cases} y^* & \text{if } y^* > 0 \\ 0 & \text{if } y = 0 \end{cases}$$

The uncensored observations (those that show payments of dividends) are treated in the same way as in the OLS regression. However, the probability of being censored applies for censored observations (those that show zero payments of dividends). The standard Tobit model may not be appropriate for the modeling of censored panel data, due to the presence of unobserved heterogeneity. Therefore, the unobserved effects (fixed and random) need to be taken into consideration. It will result in two types of unobserved effects in Tobit models: (1) fixed, and (2) random. According to STATA (2000) and Long (1997), the estimation of a

fixed effects Tobit model is complex. This is because, at present, there is no feasible estimator for a fixed effects Tobit model. Therefore, the fixed effects Tobit model was not considered in this study. The study adopted a random effects Tobit model.

The Tobit model specification for this study was:

$$Y_{it} = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \beta_6 X_{6t} + \beta_7 X_{7t} + \mu_{it} + e_{it} \quad \text{vi}$$

$$Y^*_{it} = \begin{cases} Y^*_{it} & \text{if } y_{it}^* > 0 \\ 0 & \text{if } y_{it} = 0 \end{cases}$$

Y^*_{it} (The dependent variable) that is (Amount of dividend paid) is censored to zero if the observation has zero amount of dividends paid and y^* if the observation has a payment:

Where:

Y^*_{it} = Amount of Dividend Paid ($Y^*_{it}, 0$)

X_1 = Financial Leverage

X_2 = Business risk

X_3 = Business Growth rate

X_4 = Profitability

X_5 = Earnings per share

X_6 = Financial sector dummy variable

X_7 = Size of the firm

e = Error term

$\beta_1 - \beta_7$ = coefficients of independent variable

$\beta_0 = \text{constant}$

The Tobit model was used to investigate the factors influencing the amount of dividends paid. The amount of dividends was captured by their logarithm values. A Tobit model was used because of its ability to censor where an amount was paid and where it was not paid. The main reason for this was to avoid inconsistent estimates (Greene, 2003). The model used amount of dividends paid while the Probit model used binary numbers to indicate the decision to pay and not to pay. Zero amount of dividends paid indicated a decision not to pay while where any amount was paid, indicated the decision to pay.

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the descriptive statistics, pre-estimation and the results of the two models that were adopted to achieve the study's objectives.

4.1 Descriptive Statistics

The study conducted panel data descriptive statistics and t tests for differences in mean as shown below.

4.1.1 Panel data descriptive statistics (Overall, Between and Within)

The panel data descriptive statistics regarding the mean and standard deviation were calculated and represented as shown in Table 2 below. The overall mean amount of log of dividends paid by the 33 firms in the study period was 15.18463. The value of 6.0969 of standard deviation of amount of dividend paid in a 10 year period between the 33 firms indicates a wide variation. There was also a wide variation in the yearly amount of dividends paid by the firms in the study period as indicated by a standard deviation of 7.03. The findings also revealed wide variation in EPS between the firms as well as EPS yearly in the study period as indicated by standard deviations of 6.631 and 10.537 respectively.

Concerning profitability, it was revealed that there was a wide variation in the profits realized between the firms in the study period as indicated by a standard deviation of 0.0692. The yearly variations in profits realized by the firms listed at the Nairobi securities exchange was also found to vary widely as indicated by a standard deviation of 0.086. The variations in financial leverage between the firms listed at Nairobi securities exchange and also yearly variations in all the firms had a small variation however there was a wide variation in business growth rate yearly among the firms listed at the Nairobi securities exchange but a

small variation in business growth rate between the firms as indicated by a standard deviation of 0.538 and 0.245 respectively.

After establishing the panel data descriptive statistics, the study went ahead to establish the descriptive statistics and t-test for the differences in mean of the data as shown in Appendix 3.

TABLE 2

Panel Data Descriptive Statistics (Overall, Between and Within)

Variable		Mean	Std. Dev.	Min	Max	Observations
Amount of Dividend paid	Overall	15.18463	9.25139	0	26.12586	N = 330
	Between		6.096955	1.594181	24.9264	n = 33
	Within		7.030807	-7.02724	32.16727	T = 10
EPS	Overall	6.927657	12.40127	-46.74	100.05	N = 330
	Between		6.631169	-3.072	25.745	n = 33
	Within		10.5367	-58.7084	88.08166	T = 10
Business Profitability	Overall	0.070494	0.109845	-0.64113	0.508738	N = 330
	Between		0.069281	-0.06983	0.246759	n = 33
	Within		0.086008	-0.50081	0.572898	T = 10
Financial leverage	Overall	0.671531	0.482566	0	5.738935	N = 330
	Between		0.366413	0.077926	1.782102	n = 33
	Within		0.31982	-0.66494	4.753577	T = 10
Business growth rate	Overall	0.181444	0.59077	-0.56503	9.226141	N = 330
	Between		0.245486	-0.2183	1.348062	n = 33
	Within		0.538883	-1.16679	8.059523	T = 10
Size	Overall	19.06512	4.664688	10.76882	26.62966	N = 330
	Between		4.696673	11.32695	25.70169	n = 33
	Within		0.551372	17.28725	20.48155	T = 10
Business risk	Overall	0.045399	0.081282	0.00001	0.756679	N = 330
	Between		0.050852	0.002169	0.234384	n = 33
	Within		0.063966	-0.18681	0.567694	T = 10

4.1.2 Overall descriptive statistics

After calculating the panel data descriptive statistics, the overall descriptive statistics regarding the mean and standard deviation were calculated and represented as shown in appendix 3 below. In addition to that, a t-test was also conducted to find out whether there

was a significant difference between the mean of the variables in the financial and non-financial sectors. The mean amount of the log of dividends paid for the non-financial firms is 15.40988 with a standard deviation of 9.556722 indicating a large variability in the amount of dividends paid over time among the non-financial firms listed on the NSE. The financial firms had a mean amount of the log of dividend payout of 14.58394 with a standard deviation of 8.40397 which also indicated a large variability in the amount of dividend paid over time. The variability is, however, less than that of non-financial firms.

A t-test was conducted to test whether there was a significant difference between the mean amount of the log of dividends paid by non-financial firms and that paid by financial firms. The null hypothesis states that there is no significant difference between the mean amounts of the log of dividends paid by the two sectors was accepted. Therefore, there is no significant difference between the mean amount of dividends paid by the firms in the financial sector and that paid by the firms in the non-financial sector.

The mean earnings per share for the non-financial sector firms was 7.1532 with a standard deviation of 13.83916 which also indicates a high dispersion in earning per share among non-financial firms listed on the NSE. The Mean earnings per share of financial firms were 6.3297 with a standard deviation of 7.3218 which also indicates a high dispersion in earning per share among the financial firms. However, the dispersion is higher in the non-financial firms as compared to financial firms listed on the NSE. The variability of earnings per share among the financial firms was also less than that of the non-financial firms. The results of the t-test conducted to ascertain whether there was a significant difference between the mean earnings per share of firms in the two sectors revealed that there was no significant difference between the mean earnings per share of the financial and non-financial firms listed on the NSE.

Looking at the mean value of 0.0862558 for return on assets of non- financial firms and a standard deviation of 0.1244 indicates a small dispersion in profitability among the non-financial firms listed on the NSE. The mean value of return on assets was 0.028461 with a standard deviation of 0.023778 which indicates a small dispersion in profitability among the financial firms listed on the NSE. The variation in profitability is, however, smaller than the variation among the non-financial firms. The t-test results indicate that there is a significant difference between the mean values of profits made by the non- financial firms as compared to financial firms.

The t-test results in Appendix 3 also indicate that there is a significant difference between the mean financial leverage, size of the firm and also business risk of the non-financial and financial firms listed on the NSE. The non -financial firms face more business risks as compared to the financial firms.

4.2 Pre-Estimation Tests

Prior to running regression models, pre-estimation tests were conducted. The pre-estimation tests conducted, in this case, were correlation analysis and unit root tests. The results are as presented below

4.2.1 Correlation analysis

The study assessed the associations among the predictor variables using the pair-wise correlation matrix. The study conducted a test to check the association among the variables in financial and non-financial sectors separately and then combined. The result in Table 3 shows the correlation matrix of the variables in the non-financial sector. The results indicate that most of the independent variables are showing coefficients with weak magnitude. There is a weak association between the independent variables in the non- financial sector apart from the relationship between profitability and earnings per share which is significant with a

correlation coefficient of 0.4872. The association between financial leverage and EPS and profitability is negative but significant though weak. Business risk has a negative but significant association with profitability but a positive and significant association with financial leverage. However, the results indicated that there was no problem of multicollinearity among the variables within the non-financial sector since no association had a value greater than 0.7.

TABLE 3

Correlation in Non- Financial Sector

	Earnings per share	profitability	Financial leverage	Business growth rate	Size	Business risk
Earnings per share	1					
profitability	0.4872*	1				
Financial leverage	-0.1893*	-0.2940*	1			
Business growth rate	0.0057	0.0474	-0.1152	1		
Size	0.0267	-0.0124	-0.2758*	0.2038*	1	
Business risk	-0.0598	-0.3932*	0.3057*	-0.1028	-0.2249	1

The study also established the association among the variables within the financial sector. The results of the correlation matrix were as indicated in Table 4 below. From the results, it can be noted that most of the independent variables are showing coefficients with weak magnitude. There is a weak association between the independent variables in the financial sector. There is a positive and significant association between profitability and

earnings per share. The association is, however, weak as indicated by a coefficient of 0.2878. The association among other variables in the financial sector is not significant. However, the results indicated that there was no problem of multicollinearity among the variables within the financial sector since no association had a value greater than 0.7.

TABLE 4

Correlation in Financial Sector

	Earnings per share	Profitability	Financial leverage	Business growth rate	size	Business risk
Earnings per share	1					
profitability	0.2878*	1				
Financial leverage	-0.0421	0.0819	1			
Business growth rate	-0.0074	-0.0695	0.0221	1		
Size	0.1498	0.1657	0.1224	0.1434	1	
Business risk	-0.1028	0.1906	-0.0229	-0.1171	-0.1286	1

The study finally established the association among the variables in the two sectors combined and the results are as indicated in Table 5 below. There was a positive and significant association between profitability and earning per share. The association is, however, stronger as compared to the same association when the sectors are separated. When the sectors are combined, the association between financial leverage and earning per share and profitability is negative and significant. As shown when the two sectors are separate, there was still no problem of multicollinearity in the combined sectors. The study proceeded on to test for the presence of unit roots in the data before running the regressions.

TABLE 5**Overall Correlation**

	Earnings per share	Profitability	Financial leverage	Business growth rate	size	Business risk	financial sector dummy
Earnings per share	1						
Profitability	0.4643*	1					
Financial leverage	-0.1826*	-0.3203*	1				
Business growth rate	0.0051	0.046	-0.1097*	1			
Size	0.0035	-0.1674*	-0.0586	0.1295*	1		
Business risk	-0.0476	-0.2923*	0.2276*	-0.0892	-0.3557	1.0000	
Financial sector dummy	-0.0296	-0.2347*	0.1921*	-0.0213	0.6868	0.2926*	1

4.2.2 Unit root tests

Most economic variables are usually non-stationary in nature and prior to running a regression analysis; unit root tests were thus conducted using the Levin-Lin-Chu (LLC) test to establish whether the variables were stationary or non-stationary. The purpose of this is to avoid spurious regression results being obtained by using non-stationary series. Results in Table 6 below indicate that all variables are stationary (i.e. no presence of unit roots) hence there was no need of first differencing.

TABLE 6**Unit Root Test**

Variable Name	LLC Adjusted t* Statistic	p-Value	Conclusion
Amount of Dividend Paid	-67.3661	0.0000	Stationary
Earnings per share	-9.5596	0.0000	Stationary
Profitability	-3.8192	0.0001	Stationary
Business Growth rate	-28.5326	0.0000	Stationary
Size	-2.2492	0.0122	Stationary
Business Risk	-7.3394	0.0000	Stationary

Having established that there was no problem of multicollinearity and presence of unit root, the data was deemed good to be used in to testing the relationship between the predictor and the dependent variable through the random effect probit and random effect Tobit regression models as presented in below.

4.4 Random Effects Probit Regression Results.

The study used a random effects probit model by integration method to investigate the factors that lead the firm to decide to pay (or not pay) dividends. Appendix 4 shows the results of the random effect probit regression model where the dividend payout decision is censored to zero if there is no dividend paid and 1 if the observation has a payment. The significance of the model was tested using F-statistic $\text{prob} > \chi^2$ that was significant as shown by a value of 0.000 meaning that the overall model fits well. The results show that an increase in EPS increases the probability of the decision to pay dividends. The results also indicated that an increase in financial leverage decreases the probability of the decision to pay dividends while an increase in business risk decreases the probability of the decision to pay dividends. The

results further showed that an insignificant positive relationship exists between the profitability of the firm and decision to pay dividends. The probability of a decision to pay dividends increases with an increase in profitability.

There was an insignificant negative relationship between the decision to pay dividends and business growth rate. An increase in business growth rate decreases the probability of the decision to pay dividends. Further results indicated that the probability of financial firms to make the decision to pay dividends is lower by 0.3113 as compared to non-financial firms. This relationship is however not significant implying that there is no significant difference in the decision to pay between the two firms. Based on these results, the study suggests that the key factors that influence the decision to pay dividends are EPS, financial leverage, and business risk. Profitability, business growth rate, size and financial sector dummy were found to be insignificant.

After determining the factors that influence the decision to pay dividends, the study sought to establish the factors that influence the amount to be paid. This was achieved by running the random effect Tobit regression model as highlighted in the next section.

4.5 Random Effects Tobit Regression Results.

Table 7 below indicates the results of Random effects Tobit regression model by integration method used in the study. The significance of the model was tested using F-statistic $\text{prob} > \chi^2$ that was significant as shown by a value of 0.000. This means that the overall model fits significantly well the dataset. The results of the random effects Tobit model indicate a positive and significant relationship between EPS and amount of dividend paid implying that a one unit increase in EPS increases the amount of dividend paid by 0.1665. Likewise, a one unit decrease in EPS decreases the amount of dividend paid by 0.1665. There is also a positive

and significant relationship between profitability and amount of dividend paid. A one unit increase in profitability of the firm increases the amount of dividend paid by 37.4498 units.

Financial leverage and business risk had a negative and significant relationship with the amount of dividend paid. The implication is that a one unit increase in financial leverage decreases the amount of dividend paid by 9.0938 units while a one unit increase in business risk decreases the amount of dividend paid by 50.4998 units. There was, however, a negatively insignificant relationship between business growth rate and the amount of dividend paid by the firms listed on NSE. The results also indicated that the relationship between size, financial sector dummy and the amount of dividend paid were insignificant. However, there is a negative relationship between the financial sector dummy and the decision to pay but a positive relationship with the amount of dividends paid.

TABLE 7**Random effects Tobit regression results.**

				Wald chi2(7) = 80.15	
				Prob > chi2 = 0.0000	
Amount of dividend payout	Coefficient	Std. Err.	Z	P> z	[95% Conf. Interval]
					Lower
Earnings per share	0.166517	0.054388	3.06	0.002	0.059918 0.273116
Profitability	37.44989	9.469098	3.95	0.000	18.8908 56.00898
Financial leverage	-9.0938	2.447309	-3.72	0.000	-13.8904 -4.29716
Business growth rate	-2.00611	1.028764	-1.95	0.051	-4.02245 0.010232
Size	0.155309	0.319369	0.49	0.627	-0.47064 0.78126
Business Risk	-50.4999	12.33454	-4.09	0.000	-74.6751 -26.3246
Financial sector dummy	0.664467	3.435609	0.19	0.847	-6.0692 7.398136
Constant	14.9895	6.190543	2.42	0.015	2.856258 27.12274

4.6 Chapter Summary

The chapter outlined the findings of the relationship between the dependent variable and the predictor variables. There is a significant relationship between earnings per share, financial leverage and business risk and the decision to either pay or not to pay dividends. Earnings per share positively influence the decision to pay while both financial leverage and business risk influences the decision to pay dividends negatively. There is also a positive and significant relationship between EPS, profitability and the amount of dividend paid meaning that an increase in these two predictor variables increases the amount of dividend paid. Financial leverage and business risk had a significant and negative relationship with the amount of

dividend paid. An increase in these predictor variables decreases the amount of dividend paid. The findings also indicated that business growth rate and financial sector have an insignificant relationship with the amount of dividend paid.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of findings, conclusion, and recommendations of the study. The chapter also suggested areas for further study.

5.1 Summary of Findings

This section presents the summary of the findings in line with the objectives of the study.

5.1.1 *Financial leverage*

The study findings indicate that financial leverage has a negative and significant relationship with the amount of dividend paid. A one unit increase in financial leverage decreases the amount of dividend paid by 9.0938 units. The probit regression results also indicate that a rise in financial leverage decreases the probability of dividend payout decision to pay dividends. The interpretation of the findings is that highly leveraged firm's aim at maintaining their internal cash flow to meet obligations instead of paying a cash dividend to shareholders and protect their creditors. Those firms that acquire short term loans to supplement their cash flow, will have a high financial leverage. Such firms cannot pay dividends in cash because they will be reducing their cash flow which can further lead to high leverages as they would be forced to borrow again. Because of this, they prefer to reduce the amount of cash dividends to be pay.

The findings of the current study are consistent with those of the study by Al-malkawi (2007). The latter found out that the dividend payout ratio of U.S corporations is negatively affected by higher debt ratio. As such, as the company gets high debt ratio, the financial risk increases, and dividend distribution decreases. The findings are also in line with those of the study by Ambuku (2014), which he conducted to establish the effect of debt financing on

dividend policy of firms listed on the Nairobi Securities Exchange between 2009 to 2013. His conclusion was that there exists a negative correlation between financial leverage and dividend policies employed by firms.

The significance of financial leverage in dividend policy indicates that dividend policy of firms is not irrelevant as argued by Modigliani and Miller (1961) in the dividend irrelevance theory, but rather a response to firm-level factors and business cycle considerations.

5.1.2 Business risk

The study findings indicate a negative and significant relationship between business risk and the amount of dividend paid. A one unit increase in business risk decreases the amount of dividend paid by 50.4998 units. The probit regression results indicate that an increase in business risk decreases the probability of dividend payout decision to pay dividends.

The negative relationship could be explained that riskier companies may find it difficult to plan for future activities and investments because of high stock price volatility. Due to the uncertainty it may be better to retain the earnings internally instead of paying high dividends since unexpected cash outflows may arise in the future. The findings of the current study are consistent with the findings of a study conducted by Arumba (2014) to establish the determinants of dividend payout for companies listed on the NSE. He established a negative correlation between business risk and dividend payout policy.

The significance of business risk in dividend policy of determining the amount of dividend to be paid and in determining the decision to pay or not to pay dividends indicates that dividend policy of firms is not irrelevant as argued by Modigliani and Miller (1961) in the dividend irrelevance theory, but rather a response to firm-level factors and business cycle considerations.

5.1.3 Business growth rate

The study findings revealed a negatively insignificant relationship between business growth rate and the amount of dividend paid by the firms listed on NSE. The result shows that an increase in business growth rate decreases the amount of dividend paid. The relationship is however not significant. The results from probit regression model indicate that a rise in business growth decreases the probability of dividend payout decision to pay dividends.

Though insignificant, the negative relationship between business growth rate and the amount of dividend paid may be explained in the sense that growing companies have to finance parts of the increased investments by retained earnings. To maintain the dividend payout level a company has to increase their external financing. However, since this alternative way of financing is usually relatively expensive, companies choose to decrease their dividend payouts hence a negative relationship between business growth and the amount of dividend paid.

The findings of the current study are consistent with the findings of the study by Jeong (2008) on two hundred and ninety-nine firms listed on Korea Stock Exchange. He found out that those firms with high sales growth have a greater need to retain a higher proportion of earnings to support their valuable investment projects. That way, they can improve the company's sales growth rate hence paying fewer dividends. The findings are also consistent with the findings of a study by Kivale (2013) on the effect of financial leverage and revenue growth on dividend policy of firms listed on the NSE between 2008 to 2012. It revealed a negative association between revenue growth and dividend payout.

The negative relationship is contrary to the signaling theory presented since the theory states that dividends are a signal of future growth. Even though the study investigated the impact of past growth, it is still possible to reject the signaling theory. The results indicate

that a company decreases the dividend payout ratio as the growth rate increases. The opposite is also true, and the dividend payout ratio increases as the growth rate decreases. The signaling theory is therefore not applicable to companies listed on NSE.

5.1.4 Profitability

The relationship between profitability and amount of dividend paid was positive and significant. A one unit increase in profitability of the firm increases the amount of dividend paid by 37.4498 units. However, the relationship between profitability and the decision to pay is positive but insignificant. This implies that profitability influences the amount of dividends paid but not the decision to pay. Hence, it is not an important factor in deciding whether to pay or not pay but an important factor to be considered when paying dividend.

The positive relationship between profitability and the amount of dividend paid is explicable. High profitable firms have more stable earnings and are hence able to manage larger cash flows. As a result, they pay larger dividends.

This study's findings are consistent with those of a study by Nacelur, Goad and Beelines (2007) investigating the determinants of dividend policy of Tunisian Stock Exchange. These three researchers found a positive relationship between profitability and dividend payout policy. The findings are also consistent with those of a study by Kowalewski and Oleksandr (2007) which investigated dividend policy and corporate governance in Poland. The conclusion was that larger corporations with higher profitability that do not have good investment opportunities paid more dividends.

The significant relationship to profit disapproves Modigliani and Miller's (1961) assumptions of the dividend irrelevance theory that in ideal circumstances the value of the firm is independent of the dividend policy, and profit do not have an impact on dividend payout policy. The results favor the bird in hand theory and information signaling theory.

5.1.5 *Earning per share (EPS)*

The study findings revealed a positive and significant relationship between EPS and amount of dividend paid. A one unit increase in EPS increases the amount of dividend paid by 0.1665. The probit regression results also indicated that a rise in earnings per share increases the probability of dividend payout decision to pay dividends.

The findings of the current study are consistent with the findings of a study by Ndung'u (2009). The latter study sought the determinants of dividend policy in a population of all the firms listed on the NSE and had consistently paid a dividend from 2004 to 2008. The findings were that among other factors, earnings per share positively influence dividend policy.

The significance of EPS in the dividend policy also indicates that dividend policy of firms is not irrelevant as argued by Modigliani and Miller (1961) in the dividend irrelevance theory, but rather support the bird in hand theory, in that better a certain earning now than uncertain earning tomorrow.

5.1.6 *Financial sector dummy*

Financial sector dummy has a negative relationship with the decision to pay but a positive relationship with the amount of dividends paid. However, these relationships are insignificant. The probit regression model results indicated that the probability to make the decision to pay dividends is lower in financial firms relative to non-financial firms. The explanation for these findings is explicable in the sense that non-financial firms pay dividends with the intention to reduce the agency problem and maintain firm reputation. The reason is that the legal protection for outside shareholders is limited as compared to financial firms.

The findings of the current study are consistent with the findings of a study by Al-Kuwari (2009) conducted to investigate the determinants of dividend policies for firms listed on GCC countries' stock exchanges. The latter's conclusion was that non-financial firms have a higher probability of paying dividends as compared to financial firms. The findings, however, are not consistent with those of the study by Hafeez and Attiya (2008) conducted to determine the Dynamics and Determinants of Dividend Policy in Pakistan. The conclusions of the later were that non-financial firms prefer to invest in their assets rather than pay dividends to their shareholders. The current study findings also differ with those of the study by Hellström and Inagambaev (2012) conducted among Swedish firms and separated the financial and non-financial sectors. The latter concluded that dividend payout decisions vary even among companies in the same sector.

5.1.7 Moderating effect of firm size

Study findings revealed an insignificant moderating effect of size of the firm on the amount of dividend paid. The findings of the current study are consistent with the findings of the study by Mori (2009) conducted to investigate the factors affecting dividend payout decisions among 13 different industries during the late 1960s to the mid-1970s. The latter used firm size as a moderating factor and found out that it does not have a significant moderating effect. The findings are also consistent with the conclusions of a study by Njuguna (2006). The latter found no significant moderating effect of size of the firm, the nature of industry and number of years that the firm has been in operations on dividend payout decisions.

In summary, the study results appear to indicate that dividend policy of firms is not irrelevant as argued by Modigliani and Miller (1961) in the dividend irrelevance theory, but rather a response to firm-level factors and business cycle considerations.

5.2 Conclusions

The purpose of the study was to investigate the factors influencing dividend payout decision of financial and non-financial companies listed on Nairobi securities exchange consistently since 2003 to 2012. The study sought to investigate the factors influencing both the amount of dividend paid and the decision to pay. The study used random effects probit and Tobit model to find out the relationship between predictor and dependent variable.

Based on the findings, the study concluded that EPS, financial leverage, and business risk play a key role in making the decision to pay or not to pay dividends. Earnings per share positively influences the decision to pay while both financial leverage and business risk influences the decision to pay dividends negatively. EPS and profitability plays a key role in positively determining the amount of dividend to pay while financial leverage and business risk plays a key role in negatively determining the amount of dividend to pay.

The study concluded that profitability positively and significantly influences the amount of dividend paid but positively and insignificantly influences the decision to pay. This implies that profitability influences the amount of dividends paid but not the decision to pay.

The study also concluded that business growth rate, the moderating effect of size of the firm and financial sector dummy have an insignificant influence on the decision to pay or not to pay dividend and the amount of dividends to paid.

Lastly, the study concluded that financial sector dummy has an insignificant negative relationship with the decision to pay but an insignificant positive relationship with the amount of dividends paid. This suggests that the probability of paying dividend is lower in the financial sector relative to non- financial sector. But if the decision to pay dividend is made the amount is higher.

5.3 Recommendations

Following the findings and conclusions, the study recommended that both current and potential investors who are predicting future dividends to be paid should take note of the firm's financial leverage, business risk, profitability and EPS. They should expect a decision of not being paid dividends when the firm's have high business risk and financial leverage and expect a decision of being paid dividends when the firm's have high EPS. Investors should not rely on profitability when predicting the decision to pay dividends.

Another recommendation made by the study is that managers should incorporate policies to pay low amounts of dividends when their firms have high leverage and business risk and pay more dividends when profitability and EPS are high. However, they should not necessarily consider business growth rate in paying dividends.

The study also recommended that the government should make policies that encourage dividend payout when there is a need to raise more revenue from dividend withholding tax.

5.6 Suggestions for Further Research.

Further research could usefully extend the analysis reported here by investigating the non-financial firms only and disaggregate the firms into sectors, such as the manufacturing and agricultural sector. Such an analysis will assist in identifying the sectors whose firms hand out the greatest dividends and those that offer the least. It can also help to understand the specific factors that affect dividend payout decisions in specific sectors of non-financial firms. There is a gap for another study on the same topic but using dividend payout ratio as the dependent variable.

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APPENDIX I

List of financial and non- financial firms listed at NSE

	Non -Financial companies		Financial Companies
1	Kapchorua Tea Co. Ltd	1	Jubilee Insurance company Ltd
2	Kakuzi	2	Pan Africa Insurance Holdings Ltd
3	Limuru Tea Co. Ltd	3	CFC Stanbic Holdings Ltd
4	Rea Vipingo Plantations Ltd	4	Barclays BankLtd
5	Sasini Ltd	5	Diamond Trust Bank Kenya Ltd
6	Williamson Tea Kenya Ltd	6	Housing Finance Co Ltd
7	Car and General (K) Ltd	7	Kenya Commercial Bank Ltd
8	Sameer Africa Ltd	8	National Bank of Kenya Ltd
9	Marshalls (E.A.) Ltd	9	NIC Bank Ltd
10	Express Ltd		
11	Kenya Airways Ltd		
12	Nation Media Group		
13	Standard Group Ltd		
14	TPS Eastern Africa (Serena) Ltd		
15	Athi River Mining		
16	Bamburi Cement Ltd		
17	Crown Berger Ltd		
18	E.A.Cables Ltd		
19	E.A.Portland Cement Ltd		
20	Kenya Power & Lighting Co Ltd		
21	Olympia Capital Holdings Ltd		
22	Centum Investment Co Ltd		
23	B.O.C Kenya Ltd		
24	British American Tobacco Kenya Ltd		

APPENDIX II

Secondary Data Collection Sheet

Year	Firm	Amount of dividend payout	SE Index	Share Price	Sales	Total Assets	Net income	Total debts	Number of shares
2003									
2004									
2005									
2006									
2007									
2008									
2009									
2010									
2011									
2012									
2013									

Appendix III

Descriptive and T-test for the difference in means

Variable	Group	Obs	Mean	Std. Dev.	Ho	t stat & p-value	Remark
Amount of Dividend paid	Non-financial	240	15.40988	9.556722	Ho: diff = 0	t=0.7218 (p=0.4710)	Accept H0
	Financial	90	14.58394	8.403971			
	combined	330	15.18463	9.251391			
	Diff		0.825945				
Earnings per share	Non-financial	240	7.153292	13.83916	Ho: diff = 0	t=0.5367 (p=0.5918)	Accept H0
	Financial	90	6.329778	7.321778			
	combined	330	6.92869	12.40029			
	Diff		0.823514				
Business profitability	Non-financial	240	0.086256	0.124438	Ho: diff = 0	t=4.3723 (p=0.000)	Reject H0
	Financial	90	0.028461	0.023779			
	combined	330	0.070494	0.109846			
	Diff		0.057794				
Financial Leverage	Non-financial	240	0.61486	0.55122	Ho: diff = 0	t=-3.5445 (p=0.0005)	Reject H0
	Financial	90	0.822658	0.114613			
	combined	330	0.671532	0.482565			
	Diff		-0.2078				
Business growth rate	Non-financial	240	0.189144	0.658367	Ho: diff = 0	t=0.3862 (p=0.6996)	Accept H0
	Financial	90	0.160906	0.354388			
	combined	330	0.181443	0.590769			
	Diff		0.028239				
Size	Non-financial	240	17.10618	3.921242	Ho: diff = 0	t=-17.1137 (p=0.0000)	Reject H0
	Financial	90	24.28895	0.354388			
	combined	330	19.06512	1.096353			
	Diff		-7.18277				
Business Risk	Non-financial	240	0.059942	0.091004	Ho: diff = 0	t=5.5422 (p=0.0000)	Reject H0
	Financial	90	0.006617	0.009603			
	combined	330	0.045399	0.081282			
	Diff		0.053325				

Appendix IV

Random Effects Probit Regression Model

				Log likelihood = -109.82208		
				Prob > chi2 = 0.0000		
Decision to pay	Coefficient	Std. Err.	z	p> z	[95% Confidence interval	
					Lower	Upper
Earnings per share	.1727566	0.039069	4.42	0.000	0.096183	0.24933
Profitability	4.545974	2.333642	1.95	0.051	-0.02788	9.119827
Financial leverage	-1.146386	0.512646	-2.24	0.025	-2.15115	-0.14162
Business growth rate	-.3093828	0.218331	-1.42	0.156	-0.7373	0.118538
Size	.0575462	0.067	0.86	0.390	-0.07377	0.188864
Business Risk	-6.358113	1.997031	-3.18	0.001	-10.2722	-2.444
Financial sector dummy (Financial)	-.3113392	0.707221	-0.44	0.66	-1.69747	1.074787
Constant	.1265223	1.23403	0.1	0.918	-2.29213	2.545177