

**EFFECT OF DIVIDEND PAYOUT RATIO ON VALUE OF
INSURANCE COMPANIES LISTED AT THE NAIROBI
SECURITIES EXCHANGE**

BY

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

NOVEMBER, 2018

DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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This research project has been submitted for examination with my approval as the University Supervisor.

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ACKNOWLEDGEMENT

I take this opportunity to thank the almighty God for seeing me through the completion of this project. A work of this magnitude is never accomplished without reminiscence to our creator. To my Family, friends and colleagues thanks for the tremendous support during my entire study period of this program. I would also like to express my deepest gratitude to my supervisors Dr. Lisiolo lishenga and Dr. Winnie Nyamute for their guidance and pieces of advice during the research project period.

DEDICATION

I dedicate this work to my parents Mr. and Mrs. Mogambi, my wife Mercy Binsari, son Kayden and siblings Lorna and Calvin. I thank you very much for the love, Patience and sacrifices that you have made for me. I have been forced to be away from you most of the time and at the hour of need but with your understanding, patience and prayers, we have reached this far.

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LIST OF ABBREVIATIONS

AKI	Association of Kenya Insurers
ANOVA	Analysis of Variance
CMA	Capital Markets Authority
IRA	Insurance Regulatory Authority
NSE	Nairobi Securities Exchange
VIF	Variance Inflation Factors

ABSTRACT

Dividend payment is a contentious issue in finance. Various theories have come up trying to identify the determinants of dividend payout, more so the percentage of earning that should be paid as dividend and its effect on firm value. Notwithstanding the numerous theories and models developed to clarify the relationship between these two variables, the relationship remains a puzzle. The aim of this study was to ascertain the effect of dividend payout ratio on value of insurance firms listed at the NSE. The population for the study was all 6 insurance firms listed at the NSE. The independent variable for the study was dividend payout ratio as measured by the ratio of dividend per share to earnings per share on an annual basis. The control variables for this study were capital structure as measured by debt ratio, liquidity as measured by current ratio and firm size as measured by natural logarithm of total assets. Firm value was the dependent variable and was measured by the ratio of market value of equity to book value of equity. Secondary data was collected over a ten year time frame (January 2008 to December 2017) annually. Descriptive cross-sectional research design was employed for the study and the relationship between variables established using multiple linear regression analysis. Data analysis was undertaken using the SPSS software. The results of the study produced R-square value of 0.513 which means that about 51.3 percent of the variation in value of insurance companies can be explained by the four selected independent variables while 48.7 percent in the variation in value of insurance firms listed at the NSE was associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with operational efficiency of public universities in Kenya ($R=0.716$). ANOVA results show that the F statistic was significant at 5% level with a $p=0.001$. Therefore the model was fit to explain the association between the selected variables. The findings also showed that firm size and liquidity produced positive and statistically significant values for this study. Dividend payout ratio and capital structure produced statistically insignificant values for this study. This study recommends that should work towards improving their asset base and liquidity as these two were found to have a significant positive effect on value of insurance firms listed at the NSE.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The relationship between dividends payout ratio and firm value remains an unresolved issue. On one side, there are theorists who believe that when dividend payouts increase, it increases the firm's value. While there is also a group of theorists who share the view that an increase in dividend payouts reduces value of the firm. In the middle, lies a set of theorists who claim that dividend payouts do not affect value of the firm. Gordon and Lintner (1963) argued that high dividend payouts reduce risks and this affects firm value. On the other hand, Litzenberger and Ramaswamy (1979) argued that low dividend payouts attract reduced taxes which influence value of a firm. Miller and Modigliani (1961) propagated a theory that dividend policy has no impact on share price because a firm's value depends on just its business risk and its basic earning power.

A variety of theories have been formulated by scholars on the subject of dividend policy. This study will be based on three theories. Dividends irrelevance theory by Modigliani and Miller (1961) argument is that the firm's value does not depend on its dividend policy. It also argued that a firm's value is only determined by its level of business risk and its earnings power. The bird in hand theory associated by Gordon (1963) argues that dividend policy is relevant to a firm's value. Dividend payments reduce uncertainty thus increasing share value. This prefers the present as compared to the future. A current dividend that is sure is desirable as compared to a promised dividend or capital gain in the future despite it been larger. Hence dividend policy is relevant. Dividend signaling theory as developed by Ross (1977) argues that dividend

announcements communicate to shareholders information that was previously only known to management. In this case, shareholders have ability to tell the firm's direction depending on the dividend announcement made by managers.

According to Kenya Gazette Legal Notice No.60 (2002), a clear future dividend policy is among the requirements for companies that want to be listed in the Nairobi Securities Exchange must fulfill. Because of this, dividend policy must be given management attention that is serious. This policy is one of the most important financial policies from the company's viewpoint, the Government, regulatory bodies, the shareholders, employees and the consumers. Dividend policy is a pivotal policy around which other financial policies rotate in a company (Alli, Khan, & Ramirez, 2013).

1.1.1 Dividend Payout Ratio

Dividend payout ratio is the percentage of profits paid to shareholders in form of dividends. It is the ratio of annual dividend per share to profits per share of the firm (Brockington, 2013). The returns of the shareholder is made of two components which are capital or dividend gain. Both of these factors are influenced by the dividend payout ratio. A higher share price is brought about by a low payout policy since it accelerates earnings growth rate. Less retained earnings and more dividend payouts are brought about by a high payout policy, this reduces the market price per share and thus leading to slower growth. Firms basically adopt dividend policies based on their business life cycle stage. According to Kapoor (2009) firms with higher growth for instance have fewer projects and large cash flows which enable them to pay their earnings in dividends.

Ross, Westerfield and Jaffe (2002) assert that dividend decisions are vital since they describe the type of funds that go to investors and those that the firm retain for the investment purposes. They give stakeholders essential information regarding the company's performance. Foong, Zakaria and Tan, (2007) argue that a firm's investments determines future potential dividends as well as earnings of a firm and affect the cost of capital of firms. Dividend policy of a firm is among the most vital concepts in finance from the perspective of the employees, consumers, regulatory bodies and the government. It can be viewed as a policy that acts as a pivot which is relied on by other financial policies (Sujata, 2009).

The dividend policy guides the finance manager in deciding on how much shareholders will be paid in the form of dividends for their share capital holding in the firm. The main types of dividend policies include; Constant payout ratio under which a firm agrees upon a constant percentage of the profits as dividends. It maintains this amount regardless of whether the firm makes more profits or not. Residual dividend policy payout; where a firm issue out dividends from the amount that remains after all investments have been undertaken. If all profits are used for investment then no dividends are paid out during that period. Stable dividend policy; where a constant amount of money is to be distributed to every shareholder in the firm. Occasionally firms use the stable plus extra policy where a constant amount of money is maintained as dividend to be issued to every shareholding but an extra amount can be paid when the firm makes huge profits in a particular trading period (Pandey, 2010).

1.1.2 Firm Value

Value entails the quality which solidifies something that is wanted, valued, or advantageous; the desired amount of cash to acquire something; or that ought to be

done, experienced or given in order to acquire something (Oladele, 2013). The value of a company as well be described as all the values of all its monetary rights. Business value is based on the continuous concern anticipation in the current value of all the predictable future cash flows to be produced by the assets, reduced at the corporation's weighted regular cost of wealth (Chowdhury&Chowdhury, 2010). Pandey (2005) argues that the company's value is the total values of all its monetary securities. The money streams received by the required claims should add up to the entire cash flow that assets produce. In a diverse situation where the company's profits vary, exploiting problem becomes more complex. Value could be predicated on the dividends streams that will be received by a stockholder during the life of the firm, discounted back to the current (Parkinson &Waweru, 2010).

Companies exist in the market to make worth for their stockholders. Creation of value can be described as the upsurge in the monetary worth of stockholders, as measured by proportion of marketplace stocks' value to the stocks' book value, that the presentation of a company produces. Creation of value takes place if the company produces more affluence for their bondholders that it could have not been easy to produce for themselves. To create worth, as a result, the organization needs to distinguish how to recognize, choose, as well as divide the marketplaces in which to contest; describe the kind of worth to be suggested on the market; as well as create and circulate such value (Oladele, 2013).

Firms' value plays a vital role in an investment criterion. Firm's value can be measured through different means such as net sales, paid-up-capital, total assets, capital employed and so on (Sharma, 2011). Firm's value is expected to reflect the value of both intangible and tangible assets. A common tool usually employed to

measure the value of the firm is Tobin's Q. This tool is usually a percentage of a market value of a firm to a firm's assets replacement cost (Taslim, 2013). Tobin Q measures firm value on the basis of book as opposed to market based measures. Under q proposition, a firm is said to create more value if investment returns are greater than investment cost (Taslim, 2013).

1.1.3 Dividend Payout Ratio and Firm Value

In their widely quoted studies of 1961, Miller and Modigliani posed some significant questions. Do companies with generous distribution policies consistently sell at a premium over those with –niggardly payouts? Is the reverse ever true? If so, under what conditions? Is there an optimum payout ratio or range of ratios that maximizes the current worth of the shares? An analysis of the cause-and effect relationship between a company's dividend pay-out ratio and the value of its shares is intriguing from the latter questions. According to Kapoor (2009) management's key goal to ensuring the wealth of shareholders are maximized can be attained through giving the investments of shareholders a "fair" payment.

According to the "bird-in-the hand" hypothesis, the impact of dividend policy on the value of the firm is that dividends increase the value of the firm. Dividends are differently valued to retain capital gains or earnings because the world is characterized by imperfect information and uncertainty. The "bird in the hand" of cash dividends is preferred by investors over the "two in the bush" of future capital gains. Increase in dividend payments, *ceteris paribus*, might then be related with the value of the firm increasing (Al-Malkawi, Raffert&Pillai, 2010).

Ross (1977) in the information signaling theory explained that a change in the dividend pay –out ratios of a firm that is positive is deemed as a communication of

brighter future prospects. Past empirical evidence as well as dividend relevance theories agree that cash dividend is one of the variables used to establish share value by investors and owners. An expected direct association therefore exists between the dividend pay-out ratios of firms sampled and their shares' publicly quoted value.

Dhanani (2005) posited that dividend payout can decrease agency problems that exist between shareholders and managers which then enhances the value of the firm to shareholders. Agency problems can be solved using dividends where managers can fulfill their own interests using excess free cash flows. Through the payment of dividends to shareholders, there is a reduction of free cash flows and therefore managers do not have any opportunity for making suboptimal investments (Barman, 2007&DeAngelo et al., 2006). The value of a firm and performance is thus promoted by higher returns from optimal investments. Dividend payments may make it necessary for a firm to raise funds in the external environment for new investments and this causes the level of external monitoring of corporate activities by the regulator of capital market to increase (Jiraporn et al., 2011). Therefore, there is improved corporate governance that positively impacts the performance of the firm.

1.1.4 Insurance Companies in Kenya

The Kenyan insurance industry is governed by the Insurance Act (CAP 487 of the Laws of Kenya) as the principal legislation and is regulated by the Insurance Regulatory Authority (IRA). The insurance industry is composed of a number of players, including insurance companies, reinsurance companies, insurance intermediaries (brokers, medical insurance providers and agents) and insurance service providers (claims settling agents, loss assessors, surveyors, investigators and risk managers) all of whom are licensed and regulated by IRA. As of today, there are

a total of 52 regulated insurance underwriters operating in the Kenyan insurance market including 49 insurance companies and 3 reinsurance companies. Of the 49 insurance companies, 23 insurers are licensed to underwrite general (non-life) insurance business, 15 underwrite long term (life) business while 11 companies operate as composites (underwriting both life and non-life business) (IRA Annual Report, 2017).

Most insurance firms listed on the NSE mostly pay dividends as bonus shares and cash dividends. The cash dividends are usually paid twice in any given financial year in form of interim, that is paid at the end of quarter two, and final dividend that is paid at the end of the financial year. In some cases, firms pay a one off extra dividend. However, there are a number of corporations, which have not paid profits in quite a while because of money related imperatives. Most insurance firms on the NSE have obviously characterized profit approaches and are in accordance with the general profit hone in the business.

The Kenyan insurance market has evidenced strategic acquisitions in order to improve their values. Notable mergers as well as acquisitions are; the merger of Lion of Kenya Insurance Company and Insurance Company of East Africa to form ICEA LION Group, the merger of Apollo Insurance Company Ltd and Pan Africa Insurance Company to form APA Insurance. Due to the picking of competition and underwriters seeking to increase efficiency, increase in the uptake of insurance due to a growing middle class which seeks social security, high returns, with a combination of the nascent oil as well as the gas sector has made international investors to be attracted to the market and also aiding strategic alliances with an aim to achieve growth of greater levels (Kenya Insurance Industry Report, 2017).

1.2 Research Problem

Dividend payment is a contentious issue in finance. Brealey and Myers (2005) noted that despite the decades long of research on dividend payout, there is no globally accepted explanation of firm's dividend behavior. Munyua (2014) posited that dividend payment is such an important issue in every organization that management has to take it into consideration in order to satisfy their shareholders. Various theories have come up trying to identify the determinants of dividend payout, more so the percentage of earning that should be paid as dividend and its effect on firm value. Notwithstanding the numerous theories and models developed to clarify the relationship between these two variables, the relationship remains a puzzle (Brigham & Ehrhardt, 2011).

In Kenya, the stockholders have observed numerous quoted corporations' market price increasing and continually pay dividends only for those firms to be endangered with monetary trials that have led many of them to being barred from transacting in the security market. The question if the stockholders must depend on the dividend imbursement as a business's feasibility remains a worry of decision makers (Morara, 2015). In addition, amongst the necessities that businesses want to be registered at NSE should accomplish, is that they must have a future dividend policy that is perfect (Murekefu & Ochuodho, 2012). As such, insurance companies listed at the NSE; often pay little dividends (Chebii et al., 2011). Therefore, the need to inspect the outcome of dividend payout ratio on the value of insurance companies in the Nairobi Securities Exchange listing.

Several studies have been conducted on the effect of dividend payment ratio on value of firms but these studies have yielded mixed results. Umar and Musa (2013) unveiled

an insignificant correlation between firms dividend payout ratio and share value. Oyinlola and Ajeigbe (2014) did an examination on the effect of dividend policy on the stock values of Nigeria's listed companies and concluded that both dividend payments as well as retained earnings determined the market value per share of the businesses. Khan et al., (2015) explored the effects of dividend payout ratio on effectiveness of the non-financial companies registered in Karachi Stock Exchange in Pakistan and established that dividend payout ratio has significant effects on effectiveness. Attah-Botchwey (2014) examined the Dividend Payment effects on the shares' prices of several Listed Companies on the Ghanaian Stock Exchange. Their findings revealed that share price rises as the company's dividends increases. Hooi et al., (2015) did an examination on the association between dividend policy and volatility of stock price. This study established that dividend pay-out and dividend yield were figuratively significant and adverse to share price volatility.

Locally, Ochuodho and Murekefu (2012) conducted a research that aimed at establishing the type of association present between dividend payout and firm performance. Masara (2015) studied the association between the value of commercial banks in the Nairobi Securities Exchange listing and dividend payout. This study focused on commercial banks only. Otieno (2015) did a study on the impact dividend policy has on stock returns of commercial banks listed at the Nairobi Securities Exchange, he focused on banks only and their stock returns. Githinji (2016) did a study on the impact dividend policy has on the firms' value listed at the Nairobi Securities Exchange and determined that dividend payout ratio has an effect that is weak and positive on the firms' value. Sabila (2017) carried out a study on the impact dividend payout ratio has on firms' value listed at the Nairobi Securities Exchange and established that between the study variables, an association that is strong and positive

existed. The study concluded that higher the dividend payout ratios were associated with higher firms' value listed at the NSE. Although the studies conducted before in Kenya have studied the effect of dividend payout on value of firms, none has focused on insurance companies. The current study intended to fill this research gap by answering the research question; what is the effect of dividend payout ratio on value of insurance companies listed at the Nairobi Securities Exchange?

1.3 Objective of the Study

This study's objective was to determine the effect of dividend payout ratio on value of insurance companies listed at the Nairobi Securities exchange.

1.4 Value of the Study

Findings from this study will become a point of reference for scholars, researchers as well as students who will want to carry out studies on a closely related or the same area in the future. Researchers and scholars also may use this study to identify further areas of study as well as related areas through identifying topics which require further research and through identification of gaps in the study from the review of existing empirical literature.

The study will help the management of insurance firms listed at NSE and other insurance firms in general as they might adopt the study recommendation to formulate policies on dividend payout as well as dividend decisions. This study will also give added knowledge on if dividend policies are relevant or irrelevant.

This study will also be of importance to the regulator, Insurance Regulatory Authority (IRA) in understanding the best ways to enhance the value of firms through dividend policy. This will guide the government on matters pertaining regulation on dividend payments and other policies aimed at improving firm value. Other policy makers such

as the CMA and NSE use the study findings to develop dividend policies that are effective.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter reviews theories that form the foundation of this study. In addition, previous empirical studies that have been carried before on this research topic and related areas are also discussed. The other sections of this chapter include determinants of firm value, conceptual framework showing the relationship between study variables and a literature review summary.

2.2 Theoretical Framework

Dividend still remains a puzzle since there is no clear basis on how corporations distribute dividend to shareholders. Dividend policy literature has many theories which a number of different scholars have developed. These theories are explained below and are; dividend irrelevance theory, the bird in hand theory and the information signaling theory.

2.2.1 Dividend Irrelevance Theory

This theory was advanced by Modigliani and Miller in 1961. According to this theory, the firm's value does not depend on its dividend policy. It also argues that the firm's value is only determined by its level of business risk and its earnings power. Prior to this theory, Graham and Dodd (1934) claimed that the single aim of the existence of firms is to pay dividends. Further, firms that make high dividend payments must make high priced share sales. Modigliani and Miller argued that despite the pattern of income distribution that a firm uses, its value is established by investment decisions as well as the basic earning power.

In view of the theory, dividends paid out do not determine the firm's value hence irrelevant as regards the firm valuation. In theory, a shareholder has the ability to

construct his own dividend strategy. Modigliani and Miller (1961) further argue that if a shareholder in need of a 5% dividend can create it by selling 5% of his shareholding in the event that the company fails to pay dividends. The shareholder can also use an extra dividend received to purchase additional shares if the firm pays higher dividends than expected. This purchase and sale of the shares does not include any brokerage costs hence the firm's dividend policy is irrelevant.

Bhattacharya (1979), Miller & Rock (1985), John & Williams (1985) as well as Williams (1988) stated dividend increments signaled good news and vice versa. However, this limited by the following assumptions: Perfect capital markets which exist without taxes both corporate and personal, investment policy is independent of its dividend policy, no transaction costs, rational behavior among investors as well as freely available information and the lack of risk and uncertainty. This theory is relevant to the current study as it discusses the effect of dividend policy on value of firms which is the focus of this study.

2.2.2 The Bird in Hand Theory

It was developed by Gordon (1963) together with Lintner (1962) asserting dividends are significant to the value of the firm. The factors that determine the cost of equity as per the model developed by Gordon include expected growth rate, current share price and future dividend. Thus, dividend yield as well as growth provide return to holders of equity. It purports that in measuring return on equity, dividend yield is more important than cost. According to Gordon's model of firm valuation the factors influencing firm value are cost of equity, expected dividends, expected growth and current share price.

Return on equity is determined by dividend yield and expected dividend growth rate though the model purports dividend yield is superior to expected rate of growth of dividends. There is no guarantee of growth thus no accurate estimation of capital gains and the entire market value of a stock could be lost and cause it to be bankrupt. Companies that do not pay dividends, market value in the future is uncertain if investors will realize anticipated capital gains. This depends on assumptions like the company not having access to external funding and therefore all the funding must be obtained from retained earnings, constant returns and the cost of capital is constant (Lintner, 1956).

Bird in hand theory propositions a correlation between dividend policy and value of the company. The core of the theory is that equity holders are risk averse and prefer current dividends. Gordon (1963) argues that the preference of investors is to dividends rather than anticipated capital gains due to their uncertainty. Dividend payments reduce uncertainty thus increasing share value. This is when the present is preferred to the future. A current dividend that is sure is desirable as compared to a promised future dividend or capital gain despite it been larger. Hence dividend policy is relevant. This theory is relevant to the current study as it explains how dividend payments influence value of firms.

2.2.3 Information Signaling Theory

The information signaling hypothesis is related to the propositions brought stipulated by Miller and Rock (1985). Its argument is mainly based on lack of proper flow of information between the various participants in the market particularly between investors and managers. When subjected to such conditions, managers use the high cost of paying of dividends to portray some facts concerning the firm's prospects to

the market. According to John and Williams (1985) investors might temporarily under- value a firm temporarily so as to meet its liquidity needs.

The information signaling theorem can also describe the preference for dividends over repurchases of stock despite tax advantages and that managers are slow to decrease the rate of dividends (Lintner, 1956). Thus once an increase in regular dividends is announced, it implies improvement in performance and should be viewed as firm's trust on managers which leads to increase in prices. Contrarily dividend announcements decreases should be perceived as an indication of lack of managerial confidence and poor performance and thus prices are expected to drop. If variations in dividend levels pass some market information, firms should thus lower price dispersion and determine share prices through payment of dividends. This theory is relevant to the study as it explains how information regarding dividend payments influences stock prices and in essence firm value.

2.3 Determinants of Firm Value

There are several determinants of value in companies. These factors usually cut across almost all the sectors in the economy. They include dividend payout ratio, company's liquidity position, management efficiency, financial leverage, firm size and macro-economic variables.

2.3.1 Dividend Payout Ratio

Miller and Modigliani (1961) under the dividend irrelevance theory show that in certain simplifying assumptions, a company's dividend rule doesn't influence its worth hence irrelevant. On the other hand, Gordon (1962), Lintner (1963), Ross (1977) and other scholars argue that dividend policy influence the firm's value hence relevant. According to Deeptee and Rosan (2009), the dividend policy choice for the

company is very significant and therefore, the way bosses go about creating dividend policy choices as well as if or not they monitor a particular set of policies or precise plans to make these adoptions will influence the firm's value.

Khan (2012) also explains that in businesses' viewpoint, choosing an appropriate dividend policy is a significant choice for the firm due to suppleness for investing in forthcoming projects relies on the dividend amount which they pay to their stockholders. As such, companies in designing their dividend policies consider certain significant features such as decision-making as well as behavioral environment, companies' productivity proportions, and the willingness of the company.

2.3.2 Liquidity

Liquidity is defined as the degree in which an entity is able to honor the unpaid debts in the next twelve months through cash or cash equivalents for example assets that are short term can be quickly converted into cash. Liquidity results from the managers' ability to fulfill their commitments that fall due to policy holders as well as other creditors without having to increase profits from activities such as underwriting and investment and as well as their ability to liquidate financial assets (Adam & Buckle, 2003).

According to Liargovas and Skandalis (2008), liquid assets can be used by firms for purposes offinancing their activities and investments in instances where the external finance is not forthcoming. Firms with higher liquidity are able to deal with unexpected or unforeseen contingencies as well as cope with its obligations that fall due when the levels of earnings are low. Almajali et al., (2012) noted that the liquidity of a firm may have significantly influence the insurance companies' performance; he therefore recommended the insurance companies to seek to increase their current

assets while decreasing their current liabilities. However, Jovanic (1982) noted that an abundance of liquidity may at times result to more harm. He therefore concludes that liquidity has an ambiguous effect on the firms' financial performance.

2.3.3 Management Efficiency

Management efficiency is a major internal factor that qualitatively measures and ascertains the financial performance of a firm. The ability of the management to efficiently utilize the resources of the firm, their ability to maximize revenue and their ability to reduce the cost of operation of the firm are some of the ways of assessing the management quality (Athanasoglou, Sophocles & Matthaouis, 2009).

Management efficiency is a qualitative measure and determinant of financial performance and it can be assessed by looking at the quality of the staff, the effectiveness and efficiency of the internal controls, the discipline within the organization and the effectiveness of the management systems. The quality of the management has an influence on the level of operating expenses which affects the bottom line of a company hence management efficiency significantly influences the commercial banks' financial performance (Kusa & Ongore, 2013).

2.3.4 Capital Structure

Capital structure is also another important determinant of value of a firm. The ratio of debt and equity financing is termed as the capital structure. For the proper functioning of any enterprise, a substantial amount of resources is required. This can either be capital, land or labor needed for the financing of firms' activities. These resources can either be outsourced or generated within the firm. Both the firm's capital structure and the cost associated with a particular financing instrument greatly influences the firms' decision while choosing the source of finance. The sources of finance manifest

themselves either in monetary or non-monetary forms. Excessive debt financing increases the chances of a firm going bankrupt although there are also some monitoring and tax benefits by a firm from debt financing (Su &Vo, 2010). The conflicts between the agency is also reduced through debt financing as it helps to reduce the firm's cash flow. A firm need to generate an ideal capital structure that makes the best use of the resources of the firm and thus increase the income of an organization since inadequate equity financing greatly increases the owners' control(Abu-Rub, 2012).

2.3.5 Firm Size

The level of economies of scale enjoyed by is determined by its firm size. A larger firm size is associated with lower average production scales and more efficiency in operational activities as a result of economies of scale. Thus means that higher return on asset is generated by large firms. Larger firms could however lead to the lose their control over operational and strategic activities by the management which leads to a decline in the firm's efficiency (Mule et al., 2015). Large firms have greater market power and more diversified and are likely to undergo more organizational slack when business is at boom. The firm size or enterprise also determines the investments of cash flow to investment. In measuring the size of the firm size, the sum of the firm's employees, amount of property and volume of sales are the main elements that are usually measured (Salman &Yazdanfar, 2012).

2.3.6 Age of the Firm

According to Sorensen and Stuart (2000), company's age may have an effect on firms' value. They further noted that older firms may have organizational inertia which tends to make them inflexible which may result to their inability to appreciate

the changes that occur in changing environment. However, Liargovas and Skandalis (2008), noted that older firms may have more skills because they have been in operation longer thus have more experience having enjoyed the benefits that come from learning and aren't easily prone to the liabilities that result from newness, therefore they tend to have performance that is superior as compared to newer firms.

According to Loderer and Waelchli (2009), the association present between the company's age and profitability is positive. However, it has also been observed that a firm's performance may at times decline as companies grow older due to the fact that old age may lead to knowledge, abilities and skills being obsolete thereby resulting to decay in organizations. According to Agarwal and Gort (2002), this may explain why some older companies are usually taken over.

2.3.7 Macro-economic Factors

A number of studies have been undertaken to determine the effect of macroeconomic factors on value of companies. The factors include but not limited to monetary aggregates, rate of interest, investment level in the economy, consumer price index, producer price index, GDP growth, inflation, financial depth and the degree of market efficiency. Kwon and Song (2011) carried out a research on mergers in the Korean market. He found out that the global financial crisis has an impact that is significant and negative on the cumulative abnormal returns of the acquiring company when a merger announcement is made. He also stated that it may be possible that investors are more averse to large cash outflows during a period of crisis. Flannery and Protopapadakis (2002) pointed out that inflation and money supply are well documented as the two macro-economic factors that have a significant effect on shareholders returns.

2.4 Empirical Review

Several empirical studies are available both locally and internationally to support the association between firms' performance and dividend payout ratio but most of these studies have either focused on financial performance or stock returns leaving a gap on the value of firms.

2.4.1 Global Studies

Parsian, Koloukhi and Abdolnejad (2013) examined how the future growth in earnings of the firm could be predicted using the payout ratio on listed companies in Iran Market. They analyzed 102 companies over the 2004 to 2010 period. The OLS and multivariate variables regression methods were utilized to test the hypothesis. The dependent variable was earnings growth whereas leverage, growth in past earnings, dividend payout ratio, earnings per share, size and return on assets were the independent variables. It was found that a positive link between growth in future earnings and dividend payouts existed. This study was however conducted in a different context and its findings cannot be generalized in the local context.

Oyinlola and Ajeigbe (2014) carried out a research on the impact of dividend policy on prices of stock in Nigeria. Their study was carried out on 22 firms enumerated on the Nigerian Stock Exchange using ultimate quoted share prices attained from two Nigerian magazines-The Guardian and The Punch, as well as ancillary data on their firm's rudiments as availed on their annual reports from 2009 through 2013. Granger Causality test, Correlation and Regression analysis were used to examine research hypothesis on 110 observations and the outcome unveil a significantly relevant dividend payout as well as retained earnings in the market price per company share.

This study however focused on share prices while the current study will focus on firm value.

Attah-Botchwey (2014) examined the effects of Dividend Payment on the prices of shares of several Listed Companies on the Ghanaian Stock Exchange. Out of 36 companies, Cal Bank, Eco bank and AngloGold Ashanti along with sixty of their respondents were selected by chance for the study. The use of questionnaires was applied as the primary source of data whereas information pertaining dividend policy was extracted from available fonts. The findings revealed that share price rise as the company's dividends increased. This study was however conducted in a different context and its findings cannot be generalized in the local context

Anike (2014) examined effect of dividend policy and earnings on Nigeria's banks share prices. This study used the ex-post-facto research design and panel data from five years, 2006 to 2010, was collected from the annual reports of the banks. This study's findings established that dividend yield had a significant negative impact on the share prices of banks. Earnings yield also showed a significant and negative effect on the share prices of banks and dividend payout ratio showed a non-significant and negative effect on the share prices of banks. Further, the study established that payout ratio, earnings yield and dividend yield do not influence the share prices but the size of bank was established to exhibit a positive as well as a significant effect on share prices. This study focused on commercial banks while the focus of the current study is insurance companies listed at the NSE.

Hooi et al., (2015) did an examination on the association between dividend policy instruments and volatility of stock price. The research was done on 319 randomly selected companies from Kuala Lumpur stock exchange in the Malaysian Market. It

was discovered that Dividend pay-out and dividend yield were figuratively significant and adverse to share price volatility. There was, however, a hypothesized substantial statistical relationship between long term debt and earning instability to price instability. Nonetheless, no significant relationship between price volatility and growth in assets was noted in the Malaysian Market. This study was however conducted in a different context and its findings cannot be generalized in the local context

2.4.2 Local Studies

Musyoka (2015) carried out a study whose objective was to establish the impact of dividend policy on financial performance by companies listed at the Nairobi Securities Exchange. His study found out that the main factors which influence the financial performance of listed companies include; DPR, form of dividend payments and timing of dividend payments. Other factors such as total assets and leverage were found not to have significant impact on the company's financial performance. This study will be different from study by Musyoka (2015) as it seeks to establish the effect of dividend policy on value of insurance firms in the Nairobi Securities Exchange listing. This study focused on financial performance while the current study will focus on the value of firms.

Yuko (2016) sought to examine the impact of dividend policy on firms' value listed at Nairobi Securities Exchange. To answer the research question the study used a quantitative research design. Study population comprised of 65 firms listed at NSE as at 31/12/2015. The study employed secondary data extracted from the listed firms financial statements for a period of 5 years from the 2011 – 2015. Data analysis was carried out through correlation and regression analysis. This study's findings

determined that dividend payout and firm size significantly and positively influences firm's value. The study also found that the timing of payment of dividends and the mode of dividend payment positively influences value of the firm while debt ratio negatively influences the value of the firm and this indicates that as debt levels increase, the firm's value reduces. Although this study focused on similar concepts like the current study, it did not focus on listed insurance firms which are the focus of the current study.

Ng'ang'a (2016) wanted to ascertain the impact of dividend policy on firm financial performance on firms in the NSE listing. His study looked at various components of dividend policy, namely; dividend pay-out ratio, form and timing of dividends and dividend per share. Firm financial performance was measured by return on assets. Size of the firm and leverage were used as control variables. The study period was a ten-year term (2006-2015). The populace was all the organizations listed on the NSE. The study found that a positive and significant correlation between firm performance and dividend payout-ratio and that increase in firm financial performance is associated with an increase in dividend payout-ratio and the other way around. The correlation of firm financial performance and form of dividend payment was also found positive and significant indicating that the form in which dividends are paid out has a positive effect on firm financial performance. This study focused on a different context and used financial performance as the dependent variable while the current study will have firm value as the dependent variable.

Githinji (2016) sought to investigate the impact of dividend policy on the value of shareholders in firms listed at the Nairobi Securities Exchange. The researcher used a descriptive study in carrying out the research. Test of significance was performed at

95% confidence level. Analysis of Variance determined the significance of the regression representation. The study established a weak affirmative association between growth rate, dividend yield and payment rate with the value of shareholders. The study also determined profitability to be a study variable with a strong and positive relationship with the value of shareholders. The researcher concluded that dividend policy is a critical financial decision that has to be taken as one of the ways a firm can use to raise its value of shareholders. The current study will be different from this study as it will focus on listed insurance firms.

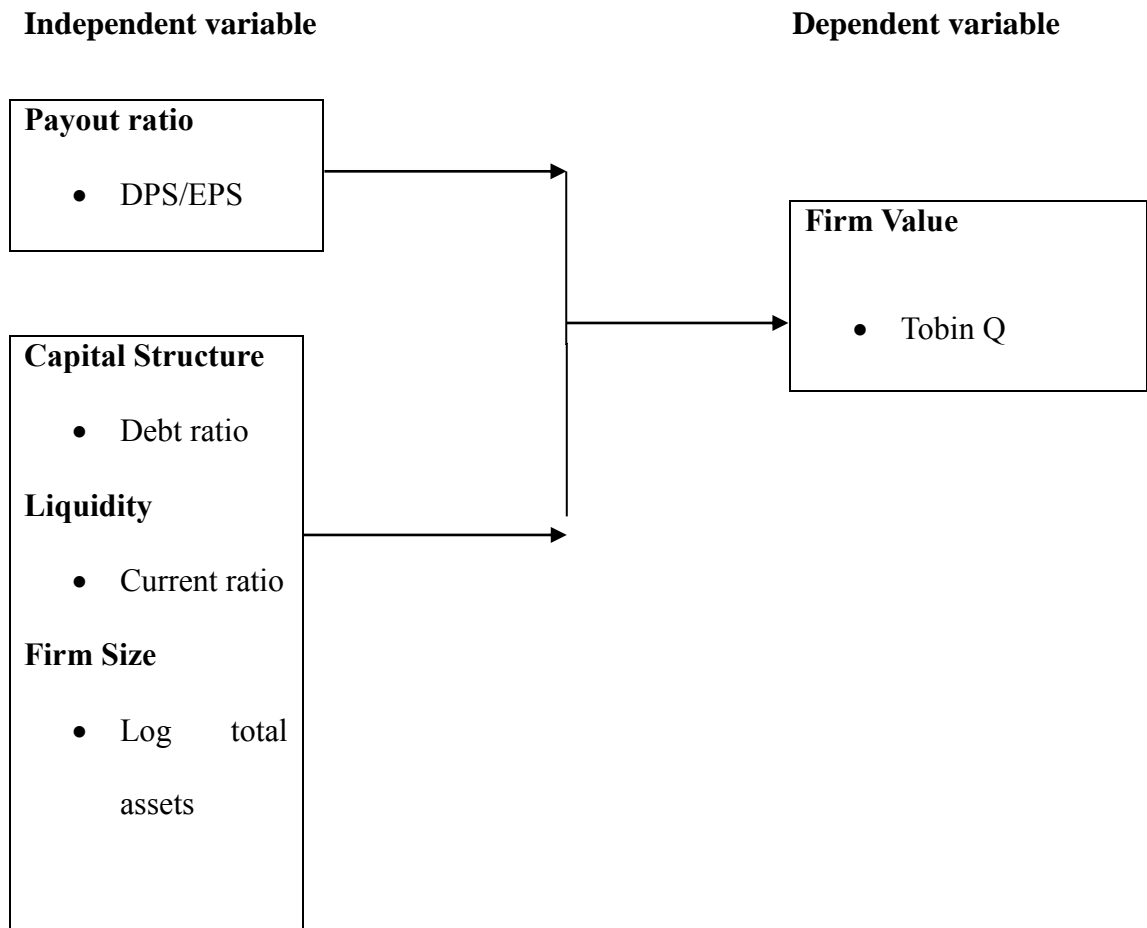
Mogere (2016) investigated effects of firm's dividend policy on the market price. The study discussed theoretical and empirical literature on dividend policy and market price. Descriptive survey was adopted by the study. This study's population comprised of all the 61 listed firms at the NSE. Secondary data was utilized in the study. Data used was obtained from the NSE. The study developed a multiple regression model. The independent variable was cash dividend policy and stock dividend policy while dependent variable was stock price volatility. The research study concluded that dividend policy to some minimal extent influenced the stock return volatility of individual firms. This study had market price as the dependent variable while the current study will have market value as the dependent variable.

2.5 Conceptual Framework

The conceptual framework is a diagrammatic representation of the relationship between the factors identified. The elements given consideration here are firm value and dividend payout ratio. The dividend payout ratio as measured by dividend per share divided by earnings per share is the independent variable. The capital structure as measured by debt ratio, firm size as measured by natural logarithm of total assets

and liquidity as measured by the current ratio are the control variables. Firm value is the explained variable and will be measured by Tobin Q (market value of equity divided by book value of equity).

Figure 2.1: The Conceptual Model



Control Variables

Source: Researcher (2018)

2.6 Summary of the Literature Review

A number of theoretical frameworks have explained the theoretically expected association between the value of firms and dividend payout ratio. Theories covered in this review are; dividend irrelevance theory, the bird in hand theory and the information signaling theory. Some of the primary influencers of firm value have also

been explored in the chapter. A number of local and international empirical studies have been carried out on dividend payout ratio and value of firms. Findings from these studies have been explored in the chapter. Although the studies conducted before in Kenya have studied the effect of dividend payout on value of firms, none has focused on insurance companies. The current study intended to fill this research gap by providing an answer to the research question; what is the impact of dividend payout ratio on value of insurance companies listed at the NSE?

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In order to determine the impact of dividend payout ratio on value of insurance companies listed at the Nairobi Securities Exchange, a research methodology was necessary to outline how the research was carried out. This chapter has four sections namely; research design, data collection, diagnostic tests and data analysis.

3.2 Research Design

A descriptive cross-sectional research design was employed in the current study to investigate the association between dividend payout ratio and value of insurance companies in the Nairobi Securities Exchange listing. Descriptive design was utilized as the researcher was interested in finding out the state of affairs as they exist (Khan, 2008). This research design was appropriate for the study as the researcher was familiar with the phenomenon under investigation but want to know more regarding the nature of relationship between the variables of the study. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

3.3 Population

According to Burns and Burns (2008), population refers to the characters of interest upon which the study seeks to draw deductions. The study's population consisted of all the 6 insurance firms listed at the NSE as at 31st December 2017.

3.4 Data Collection

Data was exclusively collected from a secondary source. It is always a regulatory requirement for firms listed at the NSE to report their values annually to the Capital

Markets Authority. Secondary data was obtained solely from the published annual financial reports of the listed insurance companies in the period contained from January 2013 to December 2017 on an annual basis and was captured in a data collection sheet. The end result was information detailing dividend payout ratio and value of firms. The specific data collected was firms' EPS, DPS, market value of equity, sales revenue, book of value equity, total expenses, current liabilities, long term liabilities and current assets.

3.5 Data Analysis

The data collected from the different sources was organized in a manner that can help address the research objective. Statistical Package for Social Sciences version 22 was utilized for data analysis purposes. Both descriptive and inferential statistics were carried out. In descriptive statistics, the minimum, maximum, mean, standard deviation, skewness and kurtosis was computed for each variable. In inferential statistics, both regression and correlation analysis was carried out. Correlation analysis was involved in determining the extent of relationship between the study variables while regression analysis was involved in establishing the cause and effect between the dependent variable (Firm value) and independent variables: dividend payout ratio, capital structure, firm size and liquidity.

3.5.1 Diagnostic Tests

Linearity uses the mathematical equation $Y=c+bX$ where c is a constant to show the association between variable X and Y . The linearity test was obtained through the scatterplot testing or F-statistic in ANOVA. Stationarity test is a process where the statistical properties such as mean, autocorrelation and variance structure do not change with time. Stationarity was obtained from the run sequence plot. Normality is

a test for the assumption that the residual of the response variable are normally distributed around the mean. This was determined by Shapiro-walk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008).

Multicollinearity is said to occur when there is a nearly exact or exact linear correlation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one. Orthogonal independent variable is an indication that the determinant is one while it is zero if there is absolute linear dependence between them and as it approaches to zero then the multicollinearity becomes more intense. Variance Inflation Factors (VIF) and tolerance levels were also be carried out to show the degree of multicollinearity (Burns & Burns, 2008).

3.5.2 Analytical Model

Using the collected data, the researcher conducted a regression analysis to determine the extent of the association between the value of firm and dividend payout ratio. The study applied the following regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon.$$

Where: Y = Firm value as measured by Tobin Q (Market value of equity/ Book value of equity).

β_0 = y intercept of the regression equation.

β_1 to β_4 = are the slope of the regression

X_1 = Dividend payout ratio as measured by dividend per share/ earnings per

share

X_2 = Capital structure given as long term debt divided by long term debt and shareholders' equity

X_3 = Firm size as given by natural logarithm of total assets

X_4 = Liquidity as given by current assets divided by current liabilities

ε =error term

3.5.3 Tests of Significance

The researcher carried out parametric tests to establish the statistical significance of both the overall model and individual parameters. The F-test was employed to establish the significance of the overall model and it was obtained from Analysis of Variance (ANOVA) while a t-test was employed to establish statistical significance of individual variables.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

This section represents study's findings established on the objectives of research. This chapter focused on collected data analysis from Capital Markets Authority to determine the impact of dividend payout ratio on value of insurance firms listed at the NSE. Using descriptive statistics, correlation analysis and regression analysis, the results of the study were presented in form of tables for easy interpretation.

4.2 Diagnostic Tests

The researcher carried out diagnostic tests on the collected data. A test of Multicollinearity was undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2 for Tolerance and values less than 10 for VIF implies that Multicollinearity doesn't exist. For multiple regressions to be applicable there should not be strong relationship among variables. From the findings, the all the variables had a tolerance values >0.2 and VIF values <10 as shown in table 4.1 showing that no Multicollinearity exists among the independent variables.

Table 4.1: Multicollinearity Test for Tolerance and VIF

Variable	Collinearity Statistics	
	Tolerance	VIF
Dividend payout ratio	0.368	1.372
Capital structure	0.310	1.326
Firm size	0.380	1.367
Liquidity	0.706	1.627

Source: Research Findings (2018)

Shapiro-walk test and Kolmogorov-Smirnov test was used in normality test. The null hypothesis for the test was that the secondary data wasn't normal. If the p-value recorded was more than 0.05, the researcher would reject it. The test findings are as illustrated in table 4.2.

Table 4.2: Normality Test

Firm value	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Dividend payout	.165	30	.300	.880	30	.784
Capital structure	.149	30	.300	.857	30	.853
Firm size	.156	30	.300	.906	30	.822
Firm Liquidity	.172	30	.300	.869	30	.723
a. Lilliefors Significance Correction						

Source: Research Findings (2018)

Both Kolmogorov-Smirnova and Shapiro-Wilk tests recorded o-values greater than 0.05 implying that the data used in research was distributed normally and therefore the null hypothesis was rejected. This data was therefore appropriate for use to conduct parametric tests such as Pearson's correlation, regression analysis and analysis of variance.

Autocorrelation tests were executed so as to check for correlation of error terms across time periods. Autocorrelation was tested by use of the Durbin Watson test. A

durbin-watson statistic of 1.949 indicated that the variable residuals were not serially correlated since the value was within the acceptable range of between 1.5 and 2.5.

Table 4.3: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.716 ^a	.513	.435	6.907574	1.949

a. Predictors: (Constant), Liquidity, Capital structure, Firm size,

Dividend payout ratio

b. Dependent Variable: Firm value

Source: Research Findings (2018)

4.3 Descriptive Analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. Table 4.4 below shows the descriptive statistics for the variables applied for the research. An analysis of all the variables was obtained using SPSS software for the period of ten years (2008 to 2017) on an annual basis. Firm value had 5.4273 as mean with a 9.1906 standard deviation. Dividend payout ratio had a mean of 0.2279 and a standard deviation of 0.3836. Capital structure had a 0.1028 mean and 0.1550 as standard deviation. Firm size had a mean of 24.347 and a standard deviation of 0.5929 while liquidity recorded a 3.1748 mean with a 2.2011 standard deviation.

Table 4.4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Firm value	30	1.000	36.637	5.42730	9.190605
Dividend pay-out ratio	30	-.600	1.500	.22790	.383608
Capital structure	30	.000	.410	.10267	.155029
Firm size	30	23.2	25.4	24.347	.5929
Liquidity	30	.911	11.648	3.17480	2.201125
Valid N (listwise)	30				

Source: Research Findings (2018)

4.4 Correlation Analysis

Correlation analysis are used to test whether a relationship exists between two variables and often range between (-) strong negative correlation and (+) perfect positive correlation. The study employed the Pearson correlation to analyze the level of correlation between the value of insurance firms and the independent variables for this study (dividend payout ratio, capital structure, firm size and liquidity).

The study found out that there was a positive but statistically insignificant correlation ($r = .206$, $p = .274$) between dividend pay-out ratio and firm value. The three control variables (capital structure, firm size and liquidity) were found to have weak, positive and significant correlations with value of insurance firms as shown by p values that were less than 0.05.

Table 4.5: Correlation Analysis

		Firm value	Dividend pay-out ratio	Capital structure	Firm size	Liquidity
Firm value	Pearson Correlation	1				
	Sig. (2-tailed)					
Dividend pay-out ratio	Pearson Correlation	.206	1			
	Sig. (2-tailed)	.274				
Capital structure	Pearson Correlation	.373*	.314	1		
	Sig. (2-tailed)	.042	.091			
Firm size	Pearson Correlation	.468**	-.003	.104	1	
	Sig. (2-tailed)	.009	.988	.586		
Liquidity	Pearson Correlation	.452*	-.147	.069	.088	1
	Sig. (2-tailed)	.012	.438	.716	.642	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

c. Listwise N=30

Source: Research Findings (2018)

4.5 Regression Analysis

Value of insurance firms listed at the NSE was regressed against four predictor variables; dividend payout ratio, capital structure, firm size and liquidity. The regression analysis was executed at 5% significance level. The study obtained the model summary statistics as illustrated in table 4.6 below.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.716 ^a	.513	.435	6.907574	1.949

a. Predictors: (Constant), Liquidity, Capital structure, Firm size,

Dividend pay-out ratio

b. Dependent Variable: Firm value

Source: Research Findings (2018)

R squared is the coefficient of determination and depicts the variations in the response variable that is brought about by the changes in the predictor variables. From the outcome in table 4.6 above, the value of R square was 0.513, a discovery that 51.3 percent of the deviations in value of insurance firms listed at the NSE are caused by changes in dividend payout ratio, capital structure, liquidity and size of the universities. Other variables not included in the model justify for 48.7 percent of the variations in value of insurance firms. Also, the results revealed that there exists a strong relationship among the selected independent variables and the firm value of insurance firms listed at the NSE as shown by the correlation coefficient (R) equal to 0.716.

Table 4.7: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1256.685	4	314.171	6.584	.001 ^b
Residual	1192.865	25	47.715		
Total	2449.549	29			

a. Dependent Variable: Firm value

b. Predictors: (Constant), Liquidity, Capital structure, Firm size, Dividend payout ratio

Source: Research findings (2018)

The significance value is 0.001 which is less than $p=0.05$. This implies that the model was statistically significant in predicting how dividend payout ratio, capital structure, liquidity and size affect value of insurance firms listed at the NSE.

The researcher used t-test to determine the significance of each individual variable used in this study as a predictor of value of insurance firms listed at the NSE. The p-value under sig. column was used as an indicator of the significance of the association between the dependent and the independent variables. At 95% level of confidence, a p-value of less than 0.05 was interpreted as a statistical significance measure. As such, a p-value above 0.05 shows that a statistically insignificant association between the dependent and the independent variables. The findings are as indicated in table 4.8.

Table 4.8: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-155.839	52.993		-2.941	.007
1 Dividend pay-out	4.669	3.581	.195	1.304	.204
Capital structure	14.254	8.827	.240	1.615	.119
Firm size	6.287	2.183	.406	2.880	.008
Liquidity	1.787	.595	.428	3.001	.006

a. Dependent Variable: Firm value

Source: Research Findings (2018)

Based on the above results, it is evident that firm size and liquidity produced positive and statistically significant values for this study (high t-value (2.880 and 3.001), $p < 0.05$). Dividend payout ratio and capital structure produced positive but statistically insignificant values for this study as shown by p values that are more than 5%.

The following regression equation was estimated:

$$Y = -155.839 + 6.287X_1 + 1.787X_2$$

Where,

Y = Firm value

X₁ = Firm size

X₂ = Liquidity

On the estimated regression model above, the constant = -155.839 shows that if selected dependent variables (dividend payout ratio, capital structure, firm size and liquidity) were rated zero, value of insurance firms listed at the NSE would be -155.839. A unit increase in firm size and liquidity would result to an increase in value of insurance firms listed at the NSE by 6.287 and 1.787 respectively. The other selected independent variables (dividend payout ratio and capital structure) were found to be insignificant determiners of value of insurance firms.

4.6 Discussion of Research Findings

The research purposed to explore the effect of dividend payout ratio on value of insurance firms listed at the NSE. Dividend payout ratio as measured by the ratio of dividend per share to earnings per share in insurance firms was the independent variable for this study. Capital structure as measured by debt ratio, liquidity as measured by current ratio and firm size as measured by the natural logarithm of total assets were the control variables while value of insurance firms listed at the NSE as measured by ratio of market value of equity to book value of equity on an annual basis was the dependent variable. The effect of each of the independent variable on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed that a positive and significant correlation exists between firm size and firm value. The association between liquidity and value of insurance firms was also found to be weak, positive and significant. Dividend payout ratio and capital structure exhibited a weak positive and insignificant association with value of insurance firms listed at the NSE.

The model summary revealed that the independent variables: dividend payout ratio, capital structure, firm size and liquidity explains 51.3% of variation in the dependent

variable as depicted by an R^2 value implying that other factors were not included in the model that account for 48.7% of changes value of insurance firms. The model is fit at 95% confidence level as the F-value was 6.584. Therefore, the overall multiple regression model is statistically significant and suitable in predicting how the independent variables selected affects value of insurance firms listed at the NSE.

The findings of this study agree with Anike (2014) who examined effect of dividend policy and earnings on Nigeria's banks share prices. This study used the ex-post-facto research design and panel data from five years, 2006 to 2010, was collected from the annual reports of the banks. This study's findings established that dividend yield had a significant negative impact on the share prices of banks. Earnings yield also showed a significant and negative effect on the share prices of banks and dividend payout ratio showed a non-significant and negative effect on the share prices of banks. Further, the study established that payout ratio, earnings yield and dividend yield do not influence the share prices but the size of bank was established to exhibit a positive as well as a significant effect on share prices.

The findings also concur with Mogere (2016) who investigated effects of firm's dividend policy on the market price. The study discussed theoretical and empirical literature on dividend policy and market price. Descriptive survey was adopted by the study. This study's population comprised of all the 61 listed firms at the NSE. Secondary data was utilized in the study. Data used was obtained from the NSE. The study developed a multiple regression model. The independent variable was cash dividend policy and stock dividend policy while depended variable was stock price volatility. The research study concluded that dividend policy to some minimal extent influenced the stock return volatility of individual firms.

This study differs with Yuko (2016) who sought to examine the impact of dividend policy on firms' value listed at Nairobi Securities Exchange. To answer the research question the study used a quantitative research design. Study population comprised of 65 firms listed at NSE as at 31/12/2015. The study employed secondary data extracted from the listed firms financial statements for a period of 5 years from the 2011 – 2015. Data analysis was carried out through correlation and regression analysis. This study's findings determined that dividend payout and firm size significantly and positively influences firm's value. The study also found that the timing of payment of dividends and the mode of dividend payment positively influences value of the firm while debt ratio negatively influences the value of the firm and this indicates that as debt levels increase, the firm's value reduces.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section summarizes the previous chapter's findings, conclusion and study limitations. The section also elucidates the policy recommendations that policy makers can implement to achieve the expected firm value of insurance firms listed at the NSE. Suggestions for further research that can be useful to future researchers are as well presented.

5.2 Summary of Findings

The study sought to investigate the effect of dividend payout ratio on value of insurance firms listed at the NSE. The independent variables for the study were dividend payout ratio, capital structure, firm size and liquidity. The study adopted a descriptive cross-sectional research design. Annual reports from CMA were used to retrieve secondary data which were analyzed using SPSS software version 22. The study used annual data for 6 insurance firms listed at the NSE covering a five year time frame as from January 2013 to December 2017.

From the results of correlation analysis, a weak positive and insignificant correlation exists between dividend payout ratio and value of insurance firms listed at the NSE. The association between liquidity and firm size with value of insurance firms listed at the NSE was found to be weak, positive and significant. The study also showed that there exist a weak positive and insignificant association between capital structure and firm value of insurance firms listed at the NSE.

The co-efficient of determination R-square value was 0.513 implying that the predictor variables selected for this study explains 51.3% of changes in the dependent

variable. This means that there are other factors not included in this model that account for 48.7% of changes in firm value of insurance firms listed at the NSE. The model is fit at 95% confidence level and F-value of 6.584. Therefore, the overall multiple regression model was statistically significant and thus suitable in explaining how the value of the insurance firms listed at the NSE is affected by the selected independent variables.

The regression results show that when all the independent variables selected for the study have zero value, value of insurance firms listed at the NSE would be -155.839. A unit increase in firm size and liquidity would result to an increase in value of insurance firms listed at the NSE by 6.287 and 1.787 respectively. The other selected independent variables (dividend payout ratio and capital structure) were found to be insignificant determiners of value of insurance firms.

5.3 Conclusion

From the findings of the study, it can be concluded from the study that value of insurance firms listed at the NSE is significantly affected by dividend payout ratio, capital structure, firm size and liquidity of the firms. Firm size was found to have a positive and significant effect on value of insurance firms listed at the NSE and this implies that an increase in the size of an insurance firm significantly increases its firm value.

The study found that dividend payout ratio had a positive but insignificant impact on value of insurance firms listed at the NSE. The study therefore concludes that an increase in dividend payout ratio among insurance firms leads to an increase in the value of the firm but not to a significant extent.

Capital structure was noted to have a positive but statistically insignificant association with value of insurance firms listed at the NSE and this means an increase in leverage leads to an increase in value though not to a significant extent. The study established that liquidity had a positive and significant impact on value of insurance firms listed at the NSE and therefore it is concluded that higher levels of liquidity leads to an increase in value of insurance firms significantly.

This study concludes that independent variables chosen for this study dividend payout ratio, capital structure, firm size and liquidity affect to a large extent value of insurance firms listed at the NSE. It could be therefore concluded that these variables significantly affect firm value as depicted by the p value of ANOVA summary. Since the four independent variables explain 51.3% of changes in value of insurance firms listed at the NSE imply that the variables not included in the model explain 48.7% of changes in value.

This finding concurs with Anike (2014) who examined effect of dividend policy and earnings on Nigeria's banks share prices. This study used the ex-post-facto research design and panel data from five years, 2006 to 2010, was collected from the annual reports of the banks. This study's findings established that dividend yield had a significant negative impact on the share prices of banks. Earnings yield also showed a significant and negative effect on the share prices of banks and dividend payout ratio showed a non-significant and negative effect on the share prices of banks. Further, the study established that payout ratio, earnings yield and dividend yield do not influence the share prices but the size of bank was established to exhibit a positive as well as a significant effect on share prices.

5.4 Recommendations

The study established that there was a positive and significant influence of firm size on value of insurance firms listed at the NSE to a significant extent. This study recommends adequate measures should be put in place by management of insurance firms to grow their assets as it has been established that firms with more assets are more likely to have a high firm value compared to firms with less assets.

Dividend payout ratio was found to have a positive association with value of insurance firms listed at the NSE. Specifically, when dividend payout ratio is increasing, firm value is also increasing though not significantly. This study recommends that policy makers in the insurance industry should work towards dividend payout ratio among insurance firms to improve firm value.

Capital structure was found to have an insignificant positive impact on value of insurance firms listed at the NSE. The research therefore recommends that when firms are setting their capital structure they should strike a balance between the tax savings benefit of debt and bankruptcy costs linked with borrowing. High levels of debt has been found to increase the value of insurance firms from the findings of this study and so insurance firms management should maintain debt in levels that do not impact negatively on value to ensure the goal of maximizing shareholders' wealth is attained.

The study found out that a positive relationship exists between value and liquidity position. This study recommends that a comprehensive assessment of insurance firm's immediate liquidity position should be undertaken to ensure the company is operating at sufficient levels of liquidity that will lead to improved value of firms. This is because a firm's liquidity position is of high importance since it influences the firm's current operations.

5.5 Limitations of the Study

The scope of this study was for five years 2013-2017. It has not been determined if the results would hold for a longer study period. Furthermore it is uncertain whether similar findings would result beyond 2017. A longer study period is more reliable as it will take into account major happenings not accounted for in this study.

One of the study's limitations was the quality of the data. It is difficult to derive conclusions from the study since the legitimacy of the situation cannot be ascertained. The data that has been used is only assumed to be accurate. The measures used may keep on deviating from one year to another subject to prevailing condition. Secondary data that had already been retrieved was utilized for the study, unlike the primary data which is first-hand information. The study also considered selected determinants and not all the factors affecting value of insurance firms mainly due to limitation of data availability.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

5.6 Suggestions for Further Research

This study focused on dividend payout ratio and value of insurance firms and relied on secondary data. A research study where data collection relies on primary data i.e. in depth questionnaires and interviews covering all the insurance firms listed at the NSE is recommended so as to compliment this research.

The study was not exhaustive of the independent variables affecting value of insurance firms listed at the NSE and this study recommends that further studies be conducted to incorporate other variables like management value, growth opportunities, corporate governance, industry practices, age of the firm, political stability and other macro-economic variables. Establishing the impact of each variable on value of insurance firms will enable policy makers know what tool to use when maximizing shareholder's wealth.

The study concentrated on the last ten years since it was the most recent data available. Future studies may use a range of many years e.g. from 1970 to date and this can be helpful to confirm or disapprove the findings of this study. The study limited itself by focusing on 6 insurance firms. The recommendations of this study are that further studies be conducted on other insurance firms operating in Kenya. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

REFERENCES

- Abu, S. (2012).Determinants of dividend payout policy: Evidence from Bangladesh, *International Journal of Economic Practices and Theories*, 2(3), 12-19.
- Adams, M. & Buckle, M. (2000).The Determinants of Operational Performance in Bermuda Insurance Market.*Applied Financial Economics*, 13, 133-43.
- Adefila, J., Oladipo, J. &Adeoti, J.O. (2013). The Effect of Dividend Policy on the Market Price of Shares in Nigeria: Case Study of Fifteen Quoted Companies, *Journal of Business and Economics*, 44(7), 78-86
- Al-Malkawi, H. A. N., Rafferty, M., &Pillai, R. (2010). Dividend policy: A review of theories and empirical evidence. *International Bulletin of Business Administration*, 9, 171-200.
- Alli, K. L., Khan, A. Q. & Ramirez, G. (2013). Determinants of Corporate Dividend Policy: A Factorial Analysis. *The Financial Review*, 28(4), 523-547.
- Anike, E. A. (2014). *The Impact of Dividend Policy and Earnings on Stock Prices of Nigeria Banks*.Unpublished MSc Project. University of Nigeria
- Athanasoglou, P., Sophocles, B., &Matthaois, D. (2009).Bank-specific, industry-specific and macroeconomic determinants of Bank profitability.*Journal of International Financial Markets, Institutions and Money*. [Online] 121-136. Available from: <http://ssrn.com/abstract:1106825>
- Attah-Botchwey, E. (2014). The Impact of Dividend Payment on Share Price of Some Selected Listed Companies on the Ghana Stock Exchange.*International Journal of Humanities and Social Science*, 4(9), 1-8.
- Barman, P. G. (2007).*An Evaluation of how Dividend Policies Impact on the Share Value of Selected Companies*.Nelson Mandela Metropolitan University.
- Bhattacharya, S. (1979).Imperfect information, dividend policy, and the bird in the hand fallacy, *Journal of Economics and Management Science*, 10(1), 259-270.

- Brealey, R. & Myers, S. (2001). *Principles of Corporate Finance*: McGraw Hill Book Company, London, UK
- Brigham, E. F. & Ehrhardt, M. C. (2011). *Financial Management Theory and Practice*, (13th Edition). South Western Cengage Learning Graphic World.
- Brockington, R. (2013). *Financial Management* (12th Edition). DP publishers
- Burns, N. & Burns, S. (2008). *The Practice of Nursing Research: Conduct, Critique and Utilization*: 5th Edition: St Louis, Elsevier Saunders
- Chowdhury, A. & Chowdhury, S. P. (2010). Impact of capital structure on firm's value: Evidence from Bangladesh. *BEH - Business and Economic Horizons*, 3 (3), 111- 122
- Cooper, R., & Schindler, S. (2008). *Business research methods*. New York: McGrawhill
- DeAngelo, H., DeAngelo, L., & Stulz, R. (2006). Dividend Policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, 81, 227-254
- Dhanani, A. (2005). Corporate dividend policy: The views of British financial managers. *Journal of Business Finance & Accounting*, 37(7), 1625 –1672
- Gordon, M. (1963). Optimal Investment and Financing Policy. *Journal of Finance*, 264- 272.
- Gordon, M. & Linter, T. (1962). Optimal Investment and Financing Policy. *Journal of Finance*, 18, 264 – 272
- Insurance Industry report (January-December 2017). *Insurance Regulatory Authority publication*.
- Flannery, M. & Protopadakis, W. (2002). Macroeconomic Factors that Influence Aggregate Stock Returns. *The Review of Financial Studies*, 7(4)751-782.

- Deeptee, P. & Roshan, B. (2009) Signaling Power of Dividends on firms future Profits: A Literature Review. *Evergreen Energy- Interdisciplinary Journal*, 4, 1-9.
- Jiraporn, P., Kim, J., & Kim, S. Y. (2011). Dividend payouts and corporate governance quality: An empirical investigation. *The Financial Review*, 46, 251 – 279.
- John, K. & Williams, J. (1985). Dividends, Dilution, and Taxes; A signalling Equilibrium. *The Journal of finance*, 40(4), 213-223
- Kapoor, H. (2015). Dividend Policy in India: New Survey Evidence. *Managerial Finance*, 41(2), 182 – 204.
- Khan, J. A. (2008). *Research Methodology*. New Delhi. APH Publishing Corporation.
- Khan, S., Anuar, M. A., Ramakrishnan, S. & Malik, M. F. (2015). A Study on the Effect of Dividend Payout Ratio and Firm Profitability (Karachi Stock Exchange). *Science International*, 27(2), 1403-1406
- Kenya Gazette Supplement No. 40 (2002). *The Capital Markets (Securities) (Public Offers, Listing and Disclosures) Regulations*. Legal Notice No. 60
- Kusa, G., & Ongore, O. (2013). Determinants of the financial performance of commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1) 237-252
- Kwon, Y. & Song, K. (2011). *Merger Process and Shareholder Wealth: Evidence from Public Tender Offer in Korea*. Korea Advanced Institute of Science and Technology, Korea.
- Lintner, J. (1956). Distribution of incomes of Corporations among dividends, retained earnings and taxes. *American Economic Review*, 46, 97-113.
- Litzenberger, R. H., & Ramaswamy, K. (1979). Dividends, short selling restrictions, tax induced investor clienteles and market equilibrium. *The Journal of Finance* 35 (2): 469–82.

- Masara, E. N. (2015). *The Relationship Between Dividend Payout and the Value of Commercial Banks Listed at the Nairobi Securities Exchange*. University of Nairobi: Unpublished MBA Project.
- Miller, M. & Modigliani, F. (1961) Dividend Policy, Growth and the Valuation of Shares. *Journal of Business*, 34, 411 – 433.
- Miller, M. H. & Rock, K. (1985). Dividend policy under asymmetric information. *Journal of Finance*, 40, 1031 -1052.
- Morara, G. O. (2015). The Influence of Dividends Policy on Market Share Prices at the Nairobi Securities Exchange. *Asian Research Journal of Business Management*, 1(3), 22-39
- Mule, R. K., Mukras, M. S. & Nzioka, O. M. (2015). Corporate Size, Profitability and Market Value: An Econometric Panel Analysis of Listed Firms in Kenya. *European Scientific Journal*, 11(13), 376 – 396
- Munyua, P. N. (2014). *Effect of Dividend Policy on Stock Prices for Firms Listed at the Nairobi Securities Exchange*. Unpublished MBA Project, University of Nairobi, Kenya
- Murekefu, T. M. & Ochuodho P. O. (2012). The Relationship between Dividend Payout and Firm Performance: A Study of Listed Companies in Kenya. *European Scientific Journal*, 8 (9), 199 – 215
- Musyoka (2015). *The effect of dividend policy on the financial performance of firms listed at Nairobi Securities Exchange*. Unpublished MBA project, University of Nairobi.
- Oladele, K. O. (2013). The Determinants of Value Creation in the Nigerian Banking Industry: Panel Evidence. *International Journal of Business and Social Science*, 4(3), 89 – 101
- Otieno, D. O. (2015). *The Effect of Change in Dividend Policy on Stock Returns of Commercial Banks Listed at the Nairobi Securities Exchange*. University of Nairobi; Unpublished MBA Project

- Oyinlola, O. M. & Ajeigbe, K. B. (2014). The Impact of Dividend Policy on Stock Prices of Quoted Firms in Nigeria. *International Journal of Economics, Commerce and Management*, 2(9), 1-17
- Pandey, I. (2005). *Financial Management*. New Delhi: Vikas Publishing House.
- Pandey, I. M. (2010). *Financial Management* (10th Edition). Vikas Publishing House, PVT ltd.
- Parkinson, J. M. & Waweru, N. M. (2010). Paying Dividends by Kenyan Companies. *Savings and Development*, 1, 35-51
- Parsian, H., Koloukhi, A. S. & Abdolnejad, S. (2013). The relationship between dividend payouts ratio and future earnings growth, a case of listed company in Iran market. *Interdisciplinary Journal of Contemporary Research in Business*, 5 (4), 21-37.
- Ross, S.A. (1977). The Determination of Financial Structure: The Incentive Signaling Approach. *The Bell Journal of Economics*, 8, 23-40.
- Ross, S., Westerfield, R., Jaffe, J. & Jordan, B. (2008). *Modern Financial Management*, 8th ed., McGraw-Hill, New York.
- Salman, A. K., & Yazdanfar, D. (2012). Profitability in Swedish micro firms: A quantileregression approach. *International Business Research*, 5(8), 94.
- Sharma, S. (2011). Determinants of equity share prices in India. *Journal of Arts, Science & Commerce*, 2 (4), 1-10
- Sorensen, B., & Stuart, E. (2000). Age, obsolescence, and organizational innovation. *Academy of Management Journal*, 25(3), 27-38
- Su, G, & Vo, H. T. (2010). The relationship between corporate strategy, capital structure and firm performance: an empirical study of the listed companies in Vietnam. *Research Journal of Finance and Economics*, 50(1), 24-30
- Sujata K., (2009). *Impact of Dividend Policy On Shareholders' Value*. Jaypee Institute of Information Technology, Noida, India.

Taslim M. W. (2013). Effect of Enterprise Risk Management Implementation on Firm Value of Companies Listed at Nairobi Securities Exchange. *International Journal of Business & Law Research*, 1(1), 65-76

Umar, M. S., & Musa, T. B. (2013). Stock Prices and Firm Earning Per Share in Nigeria. *JORIND* 11 (2), 187-192.