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

# $\mathbf{BY}$

# MARY CAROLINE AKINYI

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# **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.			
Signed:	_Date:		
MARY CAROLINE AKINYI			
D63/71134/2014			
This research project has been s	submitted for examination with my approval as the		
University Supervisor.			
Signed:	_Date:		
DR. LISIOLO LISHENGA			
Lecturer, Department of Finance	ce and Accounting		
School of Business, University of Nairobi			

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# **DEDICATION**

I would love to dedicate this project to my father, mother and brother for their encouragement and love. Finally I also dedicate it to my unborn child and dear husband, for the future is bright.

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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**

The dividend decision of a firm has for long been a subject of corporate finance and has always been studied with regard to the financing and investment decisions of the firm. The available theories on dividend policy and firm values have differed and so the debate is still ongoing. The aim of this study was to establish 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 liquidity as measured by current ratio, leverage as measured by debt ratio and firm age as measured by natural logarithm of the number of years a firm has been in existence. 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 0.358 which means that about 35.8 percent of the variation in value of insurance companies can be explained by the four selected independent variables while 64.2 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 value of insurance firms (R=0.599). ANOVA results show that the F statistic was significant at 5% level with a p=0.021. Therefore the model was fit to explain the association between the selected variables. The findings also showed that liquidity produced positive and statistically significant values for this study. Dividend payout ratio, leverage and firm age produced statistically insignificant values for this study. This study recommends that listed insurance firms should work on their liquidity positions as liquidity was 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 debate as to whether dividend policy matters has become a major issue of interest in the financial literature for a period spanning more than half a century. The works of Miller and Modigliani (1958, 1961) showed that under restrictive conditions such as a constant policy of investments, the dividend policy of a firm does not have an effect on shareholder wealth since more dividends means lesser capital gains and retained earnings leaving the shareholders' wealth unchanged. On the other hand, Gordon (1963) argues that dividend policy is relevant to a firm's value. Dividend payments reduce uncertainty thus increasing the value of share and this prefers the present over 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.

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) points out that a firm's value does not depend on its dividend policy. The theory also argued that the firm's value is determined by only 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 value. Dividend payments reduce uncertainty thus increasing share value and it prefers the present over 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. The tax preference hypothesis hold that due to the consequences of time on money value, tax obligations which are paid in the future have effective cost that are lower as

compared to present payment and thus firms will prefer paying less dividends to enjoy this benefit.

A requirement for a firm to be listed at the NSE is that it must have must have a well outlined future dividend policy. This makes dividend policy a key consideration for any organization to be listed (Murekefu & Ochuodho, 2012). As such, most of the companies listed at the NSE, often pay little dividends (Chebii et al., 2011). There is however need to conduct a study regarding the effect of dividend payout ratio on the firm's value as the country has experienced observed quoted firm's market price increasing and continually repaying dividends only for those firms to be endangered with monetary trials that have seen many of them being banned from transacting in the security market (Morara, 2015).

# 1.1.1 Dividend Payout Ratio

According to Pandey (2010) dividend payout ratio can be defined as the norm followed by management in making distribution decisions out of a firms earnings by determining the amounts of dividends to be paid to the shareholders and how much to reinvest. He argued that a perfect dividend payout ratio balances current dividends and future growth. Ross (1995) on the other hand defined dividend payment as the distribution of company profits to shareholders. Baskin (1989) measured dividend policy of a firm by considering to measures of dividend yield and dividend payout. Brealey et al., (2013) in his definition noted that payout ratio is the proportion of earnings payable to shareholders in form of dividends while dividend is the stock's return on investments with lack of capital gain.

According to Al-Makawi (2007) dividend decisions are important, because they show signals of how sustainable a company's dividend is and also its ability to grow.

Dividend decisions refer to the proportion of the earnings attributable to a company that are distributed as dividends. The ratio is sometimes calculated based on the cash flows which are exclusive of items which are not related to cash items such as depreciation. Young and high growth companies retain profits as much as possible because of the desire to reinvest the profits back to the business. Cyclical companies that experience volatility in their earnings are also not able to pay dividends frequently because they are unable to sustain high dividends in harsh economic conditions. Mature companies on the other hand who exhibit predictability in their earnings devote a higher proportion of their earnings to paying dividends. Investors also are attracted to firms with a stable target payout ratio which is a sign of financial discipline. A company with a dividend reinvestment plan can distribute more than its earnings since most investors prefer to take their dividends inform of shares rather than cash (Al-Makawi, 2007).

Simple rules of thumb do not exist with regards to payout ratios but strong companies growing revenues and earnings tend to reward shareholders with dividend increases. Dividend pay-out among many financial managers is a debatable issue. Firms do not have restrictions on how much dividends to pay ordinary shares holders, despite the fact that other factors such as legal restrictions, availability of ready cash resources and debt covenants may limit this decision. Dividend policies are very different across the globe in a way that goes to show that payment of dividends is as a result of effective pressure by a few shareholders with an aim of limiting agency behavior (Pandey, 2010).

# 1.1.2 Firm Value

According to Modigliani and Miller (1961), firm value is a financial measure indicating the valuation by the market for the entire firm. It is the total of claims from all the investors, that is, both secured and unsecured creditors and both preferred and common

equity holders. Value of the firm can also be defined as the discounted cash flows from assets and future growth, discounted using the cost of capital (Damadoran, 2002). The strategic purpose of any firm is to ensure maximization of the firm's value or shareholder's wealth (Berle & Means, 1932). Dalborg (1999) explained that the value of a firm is generated when the earnings to shareholder, in share price as well as dividend grows and becomes more than the risk-adjusted rate of return which the stock market requires. His study explained further and noted that the total shareholder return has to be greater than the cost of equity for value creation. Copeland et al., (2000) indicated that value is created in the market through earning a yield (return) on the investment more compared to the opportunity of capital cost. This indicates that growth will generate more value when the yield on the capital surpasses the cost of capital.

Value of firm explains past, present as well as the firm's performance in the future together with the long-term expectations of the investors who are the stakeholders as well as the shareholders. All the investors, financial institutions appraise the value of firm before investing their money in the firm business. There will be no creation of value for investors when the firm is not capable to make profit for investors. earlier stock price was used in explaining the firm value but in the present world of finance, the focus by researchers and financial experts has been shifted towards studying the firm (Enterprise) value to explain firm value (Oladele, 2013).

Firm's value can be measured through different means for example total assets, net sales, capital employed, paid-up-capital and so on (Sharma, 2011). The expectation is that the firm's value has to reflect the value of both tangible and intangible assets. A common tool that is usually employed to measure the value of the firm is Tobin's Q. This tool is usually a percentage of a firm's market value 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

Numerous theories as well as models have been recognized on the significance as well as insignificance of dividend payout ratio. Furthermore, writers continue to develop conclusions with respect to dividend payout from their experiential researches (Thafani & Abdullah, 2014). For instance, Miller and Modigiliani (1961) under the dividend irrelevance theory show that under certain simplifying assumptions, a company's dividend rule does not influence its worth hence irrelevant. On the other hand, Gordon (1962), Lintner (1963), Ross (1977) and other scholars argue that dividend payout influences the firm's value hence relevant.

As per the "bird-in-the hand" hypothesis the impact of dividend payout on the value of the firm is that dividends increase a firm's value. Because the world is characterized by uncertainty as well as information that are imperfect, dividends are valued in a different manner to retain capital gains or earnings. The "bird in the hand" of cash dividends is preferred by investors over the "two in the bush" of future capital gains. Dividend payments that are increasing, ceteris paribus, might then be related to the value of the firm that is increasing (Al-Malkawi, Raffert & Pillai, 2010).

According to Dhanani (2005), dividend payout can decrease agency problems between shareholders and managers and therefore cause the value of a firm to shareholders to be enhanced. Managers can utilize excess free cash flows for pursuing their own interests hence dividends solve agency problems. Managers do not have an opportunity to make suboptimal investments since through the payment of dividends to

shareholders, free cash flows are decreased (Barman, 2007& DeAngelo et al., 2006). Higher returns from optimal investments enhance the value of a firm as well as its performance. Dividend payments may make it necessary for firms to raise funds externally for new investment that increase the capital market regulator's level of external monitoring of corporate activities (Jiraporn et al., 2011). Therefore there is improved corporate governance and this positively affects 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 the Insurance Regulatory Authority (IRA) regulates it. 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).

As at 31<sup>st</sup> December 2017, six insurance firms were listed at the Nairobi Securities Exchange and most insurance companies listed on the Nairobi Securities Exchange pay dividends as bonus shares and cash dividends. Cash dividends are usually paid twice in any given financial year in the form of interim that is paid at the end of quarter two, as well as 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 dividends 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.

#### 1.2 Research Problem

The dividend decision of a firm has for long been a subject of corporate finance and has always been studied with regard to the financing and investment decisions of the firm. The dividend irrelevant theory by Modigliani and Miller (1961) postulates that the firms' value is not affected by the dividend distributions but is dependent on the firm's level of risk. Gordon (1959) and Lintner (1956) in their dividend preference theory suggested that current dividends were more preferred by the shareholders compared to capital gains. They further suggested that dividend payments reduce uncertainty thus increasing share value. The theory by Ross (1977) suggested that investors can acquire information about a firms future profit position from the implications of the announcements from dividends. This implies that a dividend payout is relevant which contradict the findings by Modigliani and Miller (1961).

A requirement for a firm to be listed at the NSE is that it must have must have a well outlined future dividend policy. This makes dividend policy a key consideration for any organization to be listed (Murekefu & Ochuodho, 2012). As such, most of the companies listed at the NSE, often pay little dividends (Chebii et al., 2011). There is however need for the effect of dividend payout ratio on the firm's value to be studied as the country has experienced observed quoted firm's market price increasing and continually repaying dividends only for those firms to be endangered with monetary

trials that have seen many of them being banned from transacting in the security market (Morara, 2015).

Several studies have been carried out on the effect of dividend payment ratio on value of firms but these studies have yielded mixed results. Attah-Botchwey (2014) did an examination on the impacts of Dividend Payment on the shares' prices of several companies listed on the Ghanaian Stock Exchange. The findings revealed that share price rises as the company's dividends increases. Oyinlola and Ajeigbe (2014) did an examination on the effect of dividend policy on the stock values of Nigeria's listed firms and concluded that both dividend payments as well as retained earnings determined the market value per share of the businesses. Hooi et al., (2015) studied the association between volatility of stock price and dividend policy. This study established that dividend pay-out and dividend yield were figuratively significant and adverse to share price volatility. 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. However, all these studies were conducted in a different context and their findings cannot be generalized to the local context.

Locally, Amollo (2016) studied the association between dividend payout and the value of commercial banks listed at the NSE. This study focused on commercial banks only and found a strong positive effect between the study variables. Yuko (2016) examine impact of dividend policy on firms' value listed on Nairobi Securities Exchange and determined that dividend policy significantly and positively affects the firms' value. Githinji (2016) studied the impact of dividend policy on the firms' value in the Nairobi Securities Exchange listing and established that dividend payout ratio has a weak

positive effect on value of firms. Anyim (2017) carried out a study on the impact of dividend policy on firms' value listed at the Nairobi Securities Exchange and established that an association that is strong positive existed between the study variables. The study concluded that the higher the dividend policy, the higher the value of firms 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 six insurance firms listed at the Nairobi Securities Exchange has consistently paid dividends either as bonus shares and/or cash dividends and therefore the need to determine whether indeed the level of dividend payout influences the value of listed insurance firms. The current study intends to fill this research gap by providing an answer to this 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 is to establish the impact of dividend payout ratio on value of insurance companies listed at the NSE.

# 1.4 Value of the Study

This study's findings will become a point of reference to scholars, students and researchers who will want to carry out studies on the same or a closely related area in the future. It might also be used by researchers and scholars to identify further areas of study and related areas through determining topics which require further research as well as through the review of existing empirical literature in order to establish the gaps in the study.

The study will help the management of insurance firms listed at NSE and other insurance firms in general as they might utilize the study recommendation in developing 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 this study's findings to develop effective 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 as well as the tax preference 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 value of a firm 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 which a company uses, its value is established through decisions of investment 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 five percent dividend can generate it through selling five percent of his shareholding when the company does not 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 and Rock (1985), John and 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.

# 2.2.2 The Bird in Hand Theory

It was developed by Gordon (1963) together with Lintner (1962) asserting the significance of dividends 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 provides 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 a company's value and dividend policy. The core of this theory is that equity holders are risk averse and prefer current dividends. Gordon (1963) argues that the investors' preference is to dividends rather than anticipated earnings 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.

# **2.2.3** Tax Preference Theory

Litzenberger and Ramaswamy (1979) in their Tax Preference theory contended that financial specialists need organizations to hold profit and in this manner provide returns as lower-burdened capital picks up instead of vigorously saddled profits. As such, low profit payout proportion pulls down the required rate of return and builds the market estimation of the association's shares. Farrar & Selwyn (1967) accept that financial specialists expand after duty salary. In a fractional harmony structure, financial specialists have two options. People pick the sum of personal and corporate disseminations as profits or capital additions. The contemplation was that if the negligible successful capital increases impose paid by shareholders is not exactly the

peripheral rate of assessment that would be paid on wage from profits then a shareholder is in a situation that is ideal with no profits.

Brennan (1970) then again broadens Farrar and Selwyn's outcomes by considering how the costs of stocks may be influenced by various profit strategies. He expected that the market costs of stocks would conform in a manner that the after expense rate of return got by holders of an organization's stock would be the same regardless of what profit arrangement the organization embraces. In Brennan's model, purchasers and merchants of the stock would require the same after assessment form from the stock regardless of the possibility that the organization embraces an alternate profit arrangement. This implies if a firm receives a high profit payout arrangement, and if shareholders need to pay higher assessments subsequently, the association's stock will have a lower cost with a specific end goal to keep up the same after expense rate of give back that shareholders require.

#### 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, market sentiments, company news and performance, company's liquidity position, management efficiency, financial leverage, firm age and macro-economic variables.

# 2.3.1 Dividend Payout Ratio

Miller and Modigiliani (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 Market Sentiments

Muriuki (2013) noted that market sentiment entails the sensibility of market contestants, independently as well as communally. This possibly is the annoying class since we know it is substantial disapprovingly, but we start to comprehend it. Market sentimentality is normally personal, unfair and fixed. For instance, it is possible to make a concrete verdict concerning a stock's forthcoming development predictions as well as the future might even authorize your forecasts, nonetheless temporarily the market may shortsightedly dwell on a single piece of newscast that keeps the stock theatrically high or low.

Market sentimentality is being discovered by the comparatively new arena of social money. It begins with the supposition that social money are actually not effectual more time, and this inadequacy could be elucidated by thinking and other communal disciplines. The notion of applying communal science to economics was completely legalized when Daniel Kahneman, was awarded the Economics 2002 Nobel Memorial Prize. Numerous of the thoughts in interactive business approve noticeable doubts: that

stakeholders tend to exaggerate data which emerge effortlessly to mind; that numerous stakeholders respond with superior pain to losses than with preference to equal gains; and that shareholders tend to carry on in an error (Muriuki, 2013).

# 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 & Matthaois, 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 effectives 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 Leverage

Leverage refers to a firm's proportion of debt to equity capital. The proportion of the two affects the cost of capital and the firm's value (Pandey, 2007). The debt amount a firm has sets out the financial performance of a firm. According to Jensen (1986), debt financing reduces the moral hazard behavior by reducing cash flow at the managers' disposal. This increases their pressure to perform hence improving firm's financial performance. Hence firms with high leverage are better placed to financially perform better. Several researchers have done studies on the association between the firm

performance and leverage and found out that leverage that is high decreases the conflict between management and shareholders leading to improved performance hence a positive relationship exists.

Baker (1973) researched the relationship between industry gainfulness and influence furthermore consolidated the impact that hazard may have on industry's productivity. Utilizing the information for ten-year time span influence was measured as the proportion of value to aggregate resources. Low estimation of leverage would suggest higher utilization of obligation capital rather than obligation to value or obligation to aggregate resources. Benefit was measured utilizing net income. The study inferred that industry conditions impact the company's decision of influence. The concentrate likewise reasoned that organizations with higher obligation capital had more productivity that is prominent.

# 2.3.5 Firm Liquidity

Liquidity refers to 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.

#### 2.3.6 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 afirm'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.

#### 2.4 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

UwalowaJimoh and Anijesushola(2012) studied on the correlation involving financial performance and dividend payout ratio for listed Nigerian firms .Parameters used were ownership, firm age and d payouts.The period of data collection for the study was (2006-2010) and the main source of data from a sample of 50 firms. The study discovered a strong direct correlation between the profitability of companies and the dividend payout ratio of Nigerian firms that were studied.

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.

Oyinlola and Ajeigbe (2014) undertook a research in Nigeria on the impact of dividend policy on prices of stock. 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 employed 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.

Attah-Botchwey (2014) did an examination on the impacts of dividend payment on the shares prices 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 rised as the company's dividends increased.

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, 2006-2010was collected from the annual reports of the banks. This study's findings established that dividend yield significantly and negatively impacted the banks' share prices. Earnings yield also showed an impact that is negative and significant on the share prices of banks and dividend payout ratio showed a non-significant as well as a negative impact 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.

#### 2.4.2 Local Studies

Musyoka (2015) carried out a study whose objective was to determine the impact of dividend policy on financial performance by firms listed at the NSE. 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 effect on the

financial performance of a company. The current study will be different from study by Musyoka (2015) as it seeks to determine the impact of dividend policy on value of insurance companies in the NSE listing.

Yuko (2016) sought to examine the effect of dividend policy on the value of companies listed at NSE. To answer the research question the study used a quantitative research design. Study population comprised of 65 firms listed at NSE as at December 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 the firm's value while debt ratio negatively influences the firm's value and this indicates that as debt levels increase, the firm's value reduces.

Ng'ang'a (2016) wanted to determine the impact of dividend policy on firm financial performance on firms in the Nairobi Securities Exchange 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 a significantly positive 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..

Githinji (2016) sought to examine the impact of dividend policy on the shareholders'

value in companies listed at the NSE. 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.

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

depended variable was stock price volatility. The research study concluded that

dividend policy to some minimal extent influenced the stock return volatility of

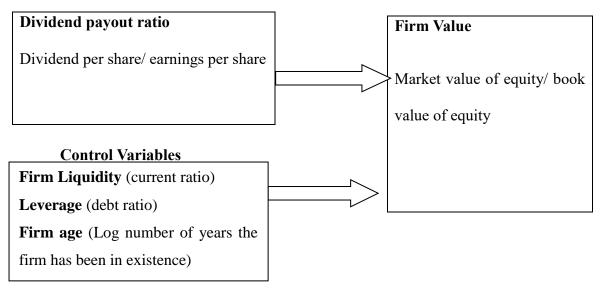
individual firms.

2.5 Conceptual Framework

**Independent variable** 

**Dependent variable** 

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Source: Researcher (2018)

Figure 2.1: The Conceptual Model

Source: Researcher (2018)

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 independent variable is the dividend payout ratio as measured by dividend per share divided by earnings per share. Management efficiency as measured by the ratio of total revenue to total assets, leverage as measured by debt ratio and age of the firm as measured by the natural logarithm of the number of years the firm has been in existence 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).

# 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 tax

preference 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 conducted on dividend payout ratio and firms' value. 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. Amollo (2016) focused on commercial banks listed at the NSE, Yuko (2016) examined firms listed on Nairobi Securities Exchange, Githinji (2016) Nairobi Securities Exchange listed firms and the same applies to Anyim (2017). The current study intends 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 firms listed at the Nairobi Securities Exchange?

# CHAPTER THREE: RESEARCH METHODOLOGY

# 3.1 Introduction

To determine the effect of dividend payout ratio on insurance firms' value that are listed at the NSE, a research methodology was necessary to outline how the research was

carried out. This chapter has four sections namely; research design, data collection, and 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 insurance firms' value in the Nairobi Securities Exchange listing. Descriptive design was utilized as the researcher is interested in finding out the state of affairs as they exist (Khan, 2008). This research design was appropriate for the study as the researcher is familiar with the phenomenon under investigation but want to know more regarding the nature of association between the study variables. A descriptive research also 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 31<sup>st</sup> 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 duration 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.

### 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 mean, kurtosis, standard deviation, minimum, maximum and skewness were computed for each variable. In inferential statistics, both regression and correlation analysis were carried out. Correlation analysis involved determining the extent of relationship between the study variables while regression analysis involved establishing the cause and effect between the dependent variable (Firm value) and independent variables: dividend payout ratio, liquidity, leverage and age of a firm.

### 3.5.1 Diagnostic Tests

Linearity uses the mathematical equation Y=bX where c is a constant to show the association between variable X and Y. The linearity test will be 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 will be 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 will be 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 will be 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 will be 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 will also be carried out to show the degree of multicollinearity (Burns & Burns, 2008).

## 3.5.2 Analytical Model

Using the collected data, the researcher will conduct a regression analysis to determine the extent of the relationship between the value of firm and dividend payout ratio. This study will apply 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, that is the ratio of market value of equity to book value of equity on an annual basis

 $\beta_0$  =y intercept of the regression equation.

 $\beta_1$  to  $\beta_4$  =are the slope of the regression

 $X_1$  = Dividend payout ratio as measured by dividend per share/ earnings per share on an annual basis

 $X_2$  = Firm liquidity as measured by the ratio of current assets to current liabilities in a given year

X<sub>3</sub>= Leverage as measured by the ratio of long term debt to long term debt and shareholders' equity on an annual basis

X<sub>4</sub>= Age of a firm as given by the natural logarithm of the number of years a firm has been in existence

 $\varepsilon$  =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 analysis of data collected from Capital Markets Authority to determine the influence of dividend payout ratio on value of insurance firms listed at the NSE. The selected independent variables for this study were dividend payout, firm liquidity, leverage and age of the firm. Regression analysis was used to test the correlation between the variables under study in relation to the objectives of the study. Analysis of variance (ANOVA) was used to test the goodness of fit of the analytical model. The findings were presented in tables and figures.

## **4.2 Diagnostic Tests**

The statistical methods applied assumed that variables were normally distributed. Multivariate statistics were adopted with the assumption that the combination of variables follows a multivariate normal distribution. Since there was direct test for multivariate normality, the study tested each variable individually and assumed that they are multivariate normal if they are individually normal. Normality test were undertaken and the results were as shown in the table 4.1 below.

**Table 4.1: Tests of Normality** 

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	Df	Sig.	Statistic	Df	Sig.	
Dividend payout	.094	30	.200*	.973	30	.479	
Liquidity	.089	30	.200*	.963	30	.241	
Leverage	.102	30	.200*	.949	30	.082	
Age	.097	30	.200*	.978	30	.483	

This is a lower bound of the true significance.\* Lilliefors Significance Correction<sub>a</sub>

**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.

The assumption of the regression model adopted was that the error term was independent and normally distributed, with a mean zero and a constant variance. To test for the independence of the variables, Durbin-Watson statistical analysis was undertaken. This analysis was used to test for the presence of auto correlation among the residuals. Residual was the difference between the observed value and the predicted

value of the variables. Table 4.2 below shows the results of Durbin-Watson analysis.

**Table 4.2: Durbin-Watson Test** 

Mode	R	R Square	Adjusted R	Std. Error of	Durbin-
1			Square	the Estimate	Watson
1	.599ª	.358	.256	7.929036	1.594

a. Predictors: (Constant), Firm age, Company liquidity, Dividend payout ratio, Leverage

b. Dependent Variable: Firm value

**Source: Research Findings (2018)** 

From table 4.2 above, the Durbin-Watson value was 1.594 meaning the residuals' values were uncorrelated since it falls within the acceptable range of 1.50 and 2.50. This means the size of the residual for one variable has no impact on the size of the residual for the next variable.

## 4.3 Descriptive Analysis

This chapter discusses the trend of the value of listed insurance firms, their dividend payout ratios, leverage, liquidity and their ages covering a period of five years from January 2013 to December 2017.

**Table 4.3: Descriptive Statistics** 

	N	Minimum	Maximum	Mean	Std.
					Deviation
Firm value	30	1.000	36.637	5.42730	9.190605

30	600	1.500	.22790	.383608
30	.911	11.648	3.17480	2.201125
30	.000	.410	.10267	.155029
30	1.386	4.394	3.42473	.861209
30				
	30 30 30	30 .911 30 .000 30 1.386	30 .911 11.648 30 .000 .410 30 1.386 4.394	30 .911 11.648 3.17480 30 .000 .410 .10267 30 1.386 4.394 3.42473

**Source: Research Findings (2018)** 

The study found out that firm value recorded an average of 5.4273 over the study period. Over the same period, dividend payout ratio recorded an average of 0.2279 while liquidity recorded an average of 3.1748. Further, leverage and firm age recorded an average of 0.1027 and 3.4247 respectively. The standard deviation indicated that firm value, dividend payout, liquidity, leverage and firm age varied over the study period. The greatest variation was recorded by firm value (9.1906) followed by liquidity (2.2011).

### **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, leverage, firm age 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. Leverage 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 while age of a firm

exhibited a weak positive and insignificant association with value of insurance firms listed at the NSE.

**Table 4.4: Correlation Analysis** 

		Firm	Dividend	Company	Leverage	Firm
		value	payout	liquidity		age
			ratio			
	Pearson Correlation	1	.206	.452*	.373*	.169
Firm value	Sig. (2-tailed)		.274	.012	.042	.372
	N	30	30	30	30	30
Dividend	Pearson Correlation	.206	1	147	.314	.074
payout ratio	Sig. (2-tailed)	.274		.438	.091	.697
payout ratio	N	30	30	30	30	30
	Pearson Correlation	.452*	147	1	.069	061

Company	Sig. (2-tailed)	.012	.438		.716	.749
liquidity	N	30	30	30	30	30
	Pearson Correlation	.373*	.314	.069	1	.378*
Leverage	Sig. (2-tailed)	.042	.091	.716		.040
	N	30	30	30	30	30
	Pearson Correlation	.169	.074	061	.378*	1
Firm age	Sig. (2-tailed)	.372	.697	.749	.040	
	N	30	30	30	30	30

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

**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, leverage, firm age 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 4.5: Model Summary** 

Mode	R	R Square	Adjusted R	Std. Error of	Durbin-
1			Square	the Estimate	Watson
1	.599ª	.358	.256	7.929036	1.594

a. Predictors: (Constant), Firm age, Company liquidity, Dividend payout ratio, Leverage

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 4.5, the value of R square was 0.358, a discovery that 35.8 percent of the deviations in value of insurance firms listed at the NSE are caused by changes in dividend payout ratio, leverage, liquidity and age of the firms. Other variables not included in the model justify for 64.2 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 value of insurance firms listed at the NSE as

**Table 4.6: Analysis of Variance** 

shown by the correlation coefficient (R) equal to 0.599.

Mod	lel	Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	877.809	4	219.452	3.491	.021 <sup>b</sup>
1	Residual	1571.740	25	62.870		
	Total	2449.549	29			

a. Dependent Variable: Firm value

b. Predictors: (Constant), Firm age, Company liquidity, Dividend payout ratio,

Leverage

**Source: Research findings (2018)** 

The significance value is 0.021 which is less than p=0.05. This implies that the model was statistically significant in predicting how dividend payout ratio, leverage, liquidity and age 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 4.7.

**Table 4.7: Model Coefficients** 

Model		Unstandardized		Standardized	t	Sig.
		Coeffi	cients	Coefficients		
		В	Std. Error	Beta		
	(Constant)	-6.622	6.861		965	.344
	Dividend payout ratio	4.576	4.119	.191	1.111	.277
1	Company liquidity	1.955	.685	.468	2.853	.009
	Leverage	14.631	10.919	.247	1.340	.192
	Firm age	.963	1.859	.090	.518	.609

a. Dependent Variable: Firm value

**Source: Research Findings (2018)** 

Based on the above results, it is evident that liquidity produced positive and statistically

significant values for this study (high t-value (2.853), p < 0.05). Dividend payout ratio,

leverage and firm age 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:

 $Y = -6.622 + 4.576X_1 + 1.955X_2 + 14.631X_3 + 0.963X_4$ 

Where,

Y = Firm value

 $X_1$ = Dividend payout ratio

 $X_2$ = Liquidity

 $X_3 = Leverage$ 

X<sub>4</sub>= Firm age

On the estimated regression model above, the constant = -6.622 shows that if selected

dependent variables (dividend payout ratio, leverage, firm age and liquidity) were rated

zero, value of insurance firms listed at the NSE would be -6.622. A unit increase in

liquidity would result to an increase in value of insurance firms listed at the NSE by

1.955. The other selected independent variables (dividend payout ratio, leverage and

age of the firm) were found to be insignificant determiners of value of insurance firms.

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### **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. Leverage as measured by debt ratio, liquidity as measured by current ratio and firm age as measured by the natural logarithm of the number of years the firm has been in existence 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 but insignificant association exists between dividend payout ratio and value of insurance firms listed at the NSE. The relationship between liquidity and firm value was found to be positive and significant. The association between leverage and value of insurance firms was also found to be weak, positive and significant. Age of the firm 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, leverage, firm age and liquidity explains 35.8% of variation in the dependent variable as depicted by an R<sup>2</sup> value implying that other factors were not included in the model that account for 64.2% of changes value of insurance firms. The model is fit at 95% confidence level as the F-value was 3.491. 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, 2006-2010 was collected from the annual reports of the banks. This study's findings established that dividend yield significantly and negatively impacted the banks' share prices. Earnings yield also showed an impact that is negative and significant on the share prices of banks and dividend payout ratio showed a non-significant as well as a negative impact 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 differ with Oyinlola and Ajeigbe (2014) who undertook a research in Nigeria on the impact of dividend policy on prices of stock. 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 employed 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.

# 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, leverage, firm age 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. Firm age also exhibited a weak positive and insignificant association with value of listed insurance firms while the association between liquidity and leverage with value of insurance firms listed at the NSE was found to be weak, positive and significant.

From the results of regression analysis, the co-efficient of determination R-square value was 0.358 implying that the predictor variables selected for this study explains 35.8% of changes in the dependent variable. This means that there are other factors not included in this model that account for 64.2% of changes in firm value of insurance firms listed at the NSE. The model is fit at 95% confidence level and F-value of 3.491. 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 model coefficient 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 -6.622. A unit increase in liquidity would result to an increase in value of insurance firms listed at the NSE by 1.955. The other selected independent variables (dividend payout ratio, leverage and age of the firm) 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, leverage, firm age and liquidity of the firms. 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.

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. Firm age was found to have a positive but insignificant effect on value of insurance firms listed at the NSE and this implies that an increase in the age of an insurance firm increases its value but not significantly. Leverage was noted to have a positive but statistically insignificant association with value of insurance firms listed at the NSE and this means that an increase in leverage leads to an increase in value though not to a significant extent.

This study concludes that independent variables chosen for this study dividend payout ratio, leverage, firm age 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 35.8% of changes in value of insurance firms listed at the NSE imply that the variables not included in the model explain 64.2% 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 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.

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 increasing their dividend payout ratio to improve firm value.

Leverage 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

leverage 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.

### 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 of 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 macroeconomic 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.

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# **APPENDICES**

# Appendix I: Insurance Firms Listed at the Nairobi Securities Exchange

- 1. Britam Holdings Ltd
- 2. CIC Insurance Group Ltd
- 3. Jubilee Holdings Ltd
- 4. Kenya Re-Insurance Corporation Ltd
- 5. Liberty Kenya Holdings Ltd
- 6. Sanlam Kenya PLC