Factors Determining Dividend Payment among Companies Listed at the Nairobi Securities Exchange

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ABSTRACT

The purpose of this study was to establish factors determining dividend payment among companies listed on Nairobi Securities Exchange. The specific focus was to establish the relationship between firm size, liquidity, stability earnings and payment of dividends by companies listed on the Nairobi Securities Exchange. The main underpinning theories to the study were the dividend relevance theory, dividend irrelevance theory and the information signaling theory. A descriptive study design was conducted. A sample of 12 firms was targeted for this study. The firms were a representative of all the sectors at NSE. Secondary data was collected and analyzed using descriptive and inferential statistics. The data was collected on a 10 year period from the year 2007 to 2016. SPSS software version 21 was used for analysis. The analyzed results were presented in form of tables, diagrams and graphs. From the empirical analysis the study found that there was positive significant effect of firm size, liquidity, earnings on dividend payment by firms listed at NSE. The study concluded that all the variables in levels of firm size, liquidity and earnings had a single unit root and were stationary at first differences at 5% levels of significance. It was also concluded that the variables (firm size, liquidity and

earnings) were normally distributed since their distribution appeared near the diagonal line. The study also concluded that the null hypothesis of no heteroscedaticity was accepted, an indication that the residuals were not heteroscedastic. Regarding cointegration, the null hypothesis of no cointegrating equation was rejected. Concerning multiple regression analysis, the study conclude that the variables had statistical significant relationship with dividend payment which meant that all the variables had a positive influence on the payment of dividends of studied firms at NSE. The study recommends that the firm size of the firm should be expanded as an increase in the firm size could imply that the company has a potential of an increase market share and thus would reap more profits and as a result be in a position to pay dividends to its shareholders. The study recommends that companies should maintain an optimal level of market liquidity as market liquidity has a positive statistical influence on dividend policy. The study finally recommends that since earnings has a positive and significant statistical influence on dividend policy then companies should strive to engage in profitable ventures so as to be in a position to pay dividends to the shareholders which is a return for their investments.

Key Words: *Dividend payment, firm size, earnings stability, liquidity*

1.0 INTRODUCTION

1.1 Background to the Problem

Investigating dividend payment decisions is one of the most important apparatus of corporate policy. The dividend strategy of a firm evaluates the separation of income between expenditure to investors and re-inventures in the company. The work of an investment manager is to assign the income to shares or held income. Reserved income is one of the most valuable sources of finance for funding the growth of businesses (Alli, Khan & Ramirez, 2017). The latter makes it ultimately likely to obtain higher shares. Companies have a challenge of allocating dividends to stockholders and reserving their income with a purpose of re-investing it back into the company to improve more growth. Any firms' decision with regard to the amount of income they could compensate out as a dividend and the quantity they could hold is the worry in dividend payout assessment (Travlos, Trigeorgis & Vafeas, 2015).

The pattern of payment of dividend influences with other things firms' stock value and character in addition to monetary performance (Malik, Gul & Rehma, 2013). Compensating out extra dividends of money is more likely to improve the the cost of the stock. On the other hand, raising dividends of cash implies that a small amount of money will be accessible for reinvestment. However, reinvesting back smaller income into the venture will decrease the predictable growth ratio and perpetually lower the cost of the stock. The company must, however, be very cautious in resolving the issuance of income to these two objectives (Kuria, 2014).

Continual collapse in the market cost of dividends is a great worry to shareholders and the monetary forecasters throughout the country and the world in common. If the objective of the finance manager is to optimize the worth of the company as well as boost the cost effectiveness of the company in terms of finance then the shareholders would opt that the company compensates out for the shares only the recommended planning of capital opportunities are available (Abor & Fiador, 2013).

According to Fumey and Doku (2013), high payout of dividend in a period can decrease the finances accessible for investment in consequent periods and that would cause the likelihood of increasing profits or liability in the subsequent period to fund ventures. Alternatively, high investment expenditure can lead to a decrease in the accessible finances to fund payout of dividends and enhance demand for external debt funding through the subsequently period to fund payment of dividends. A decrease in dividends compensated is viewed at badly by shareholders and the cost of stock generally decreases in value as shareholders look for more share paying stocks.

There are various forms of dividends paid such as cash dividends, property dividends, regular dividends and stock dividends. A Cash dividend is the most common form of the dividend. The shareholders are paid in cash per share. The board of directors announces the dividend payment on the date of declaration. The dividends are assigned to the shareholders on the date of record. The dividends are issued on the date of payment. But for distributing cash dividend, the company needs to have positive retained earnings and enough cash for the payment of dividends (Wang, Manry & Wandler, 2012). A stock dividend on the other hand is the issuance by a company of its common stock to its common shareholders without any consideration. If the company issues less than 25 percent of the total number of previously outstanding shares, you treat the transaction as a stock dividend. If the transaction is for a greater proportion of the previously outstanding shares, then treat the transaction as a stock split. To record a stock dividend, transfer from retained earnings to the capital stock and additional paid-in capital accounts an amount equal to the fair value of the additional shares issued. The fair value of the additional shares issued is based on their fair market value when the dividend is declared (Brealey, 2012).

The case of property dividends entails a company issuing a non-monetary dividend to investors, rather than making a cash or stock payment. Record this distribution at the fair market value of the assets distributed. Since the fair market value is likely to vary somewhat from the book value of the assets, the company will likely record the variance as a gain or loss. This accounting rule can sometimes lead a business to deliberately issue property dividends in order to alter their taxable and/or reported income (Brealey, 2012). Regular dividend on the other hand occurs when the board of directors wishes to return the capital originally contributed by shareholders as a dividend; it may be a precursor to shutting down the business. The accounting for regular dividend is similar to the entries for a cash dividend, except that the funds are considered to come from the additional paid-in capital account (Mirza and Azfa, 2013).

Most firms listed at the NSE mostly pay dividends in the form of cash dividend and bonus shares. Cash dividends are usually paid twice in any given financial year as interim, which is paid at the end of quarter two, and final dividend which is paid at end of the financial year. In some years when there is unexpected income, firms pay a one-off extra dividend which is consistently paid in the subsequent years (Ndeto, 2014). Wang, Manry & Wandler (2012) argue that cash dividends in China are taxable instantly to dividend owners as earnings, while dividends of stock are not taxed. In a case where cash dividend payments are absent, investors must put on the market dividends to take out their ratable segment of accrued company affluence wealth in the shape of capital benefits; besides, there is no assets benefits tax in China. Therefore, stock dividends may provide a convenient vehicle for managing capital gains extraction for individual shareholders (Wang, Manry & Wandler, 2012). For the case of Nigeria, most firms quoted on the Nigerian Stock Exchange have clearly defined dividend policies that are based on the general dividend practice in the industry (Adediran & Alade, 2013).

In Kenya, according to the Companies Act (209) provision 114, shareholders, cannot increase the amount of dividend declared by directors but have power to reduce. Profits made by corporation can either be re-invested or be distributed as dividend to stockholders. Each company formulates its own policies as regards dividend. This mostly is determined by many factors and conditions prevailing during that period. Many corporations retain part of their earnings for capitalization purpose while pay the remainder as dividend (Musiega, Alala, Musiega, Maokomba & Egesa, 2013).

Among the requirements for companies that want to be listed in the Nairobi Securities Exchange must fulfill, is that they should have a clear future dividend policy. According to Ndeto (2014) setting corporate dividend policy remains controversial and involves judgment by decision makers. In addition, there has been emerging consensus that there is no single explanation of dividend payments and there are many reasons as to why companies should pay or not to pay dividends (Mbuki, 2014). To this end, the topic of dividend policy

remains controversial, and this study is hence timely in seeking to establish the factors determining dividend payment, a case of firms listed on Nairobi Securities Exchange in Kenya.

1.2 Statement of the Problem

In the recent past, payment of dividend has been an issue of interest in the securites exchange for a long time. Additionally, despite the vast research on the topic, it remains an open subject (Brealey, 2012). Miller and Modgliani stipulates that dividend policies are all equivalent and that there is no particular policy that can increase shareholders' wealth in perfect capital markets (Al-Malkawi, Rafferty & Pillai, 2013). According to Mirza and Azfa (2013), forty years have been spent researching dividend policy, and thus far, it has not been resolved. For instance, Yegon, Cheruiyot and Sang (2014) suggest that dividends enhance shareholders wealth while Agyei and Marfo-Yiadom's (2013) indicate that dividends have no effect on shareholders wealth.

The need to pay dividends has in the past not been linked to an improvement in financial performance. For instance, companies that have recorded the greatest successes during the last years like Apple and Google chose not to pay dividends (Elgammal, 2014). Furthermore, a close observation of largest quoted companies in united Kingdom show that they have a trend of not paying dividends (Smith, 2017). While on the other hand, some companies that have not recorded impressive financial performance have continued to pay dividends (Smith, 2017). These arguments are also supported by Masara (2015) who indicate that there has not been a universal agreement on the factors determining dividend policy. This, therefore, brings a contrast to which factors determinants affects the payment of dividend by a particular firm. In essence, this is what this study sought to find out.

1.3 Research Objectives

The main objective of this study was to establish factors determining dividend payment by companies listed on Nairobi Securities Exchange. The specific objectives of the study were;

   i)   To find out the effect of firm size on dividend payment among companies listed on Nairobi Securities Exchange
   ii) To establish the effect of liquidity on dividend payment among companies listed on Nairobi Securities Exchange
   iii) To assess the effect of earnings stability on dividend payment among companies listed on Nairobi Securities Exchange

1.4 Research Hypotheses

   H_{01}:   Firm size does not have significant effect on the payment of dividends by companies listed on Nairobi Securities Exchange
   H_{02}:   Liquidity does not have a significant effect on the payment of dividends by companies listed on Nairobi Securities Exchange
   H_{03}:   Earnings stability do not have a significant effect on the payment of dividends by companies listed on Nairobi Securities Exchange

2.0 LITERATURE REVIEW

2.1   Theoretical Review

A review of the theories enables the study to determine which theories that are currently in place, the association amongst them, to what extent the present theories have been analyzed and as well as come up with new hypothesis to be tested, with an aim of establishing the appropriateness or inadequacies of such theories to research problems. A review of the past literature is an assessment account of studies revealed in the studies linked to the sampled part; it should explain, review, assess and simplify (Shisia, Marangu & Omwario,

2014).This part presents the theories associated to the thought of dividend strategy such as the Dividend Relevance theory, Dividend irrelevance theory and Information Signaling theory.

2.1.1 Dividend Relevance Theories

This notion puts into consideration the dividend to be a dynamic variable influencing the worth of the company (Lintner, 1956; Gordon, 1959; Walter, 1963). The theory unwinds the hypothesis of ideal capital markets and cogent shareholders. It examines empirically the performance trends of dividend allocations and their influence on company worth. Market hostilities are not costless and shareholders often do not act reasonably in a practical world (Lease, John, Kalay, Loewenstein & Sarig, 2000). According to Walter (1963) the alternative of dividend strategies approximately for all the time influences the worth of the company due to the plenty of beneficial shareholding chances. Lacks of cash dividend for income are the basis of finances in such case.

The theory is relevant to the study as it links dividends to payment to stakeholder. According to the theory, dividends positively affect the worth of firms. This study sought to test whether the argument is true in the Kenyan context by establishing the factors determining payment of dividends by firms listed on NSE.

2.1.2 Dividend Irrelevance Theory

The proponent of the theory was Miller and Modigliani (1961). The theory states that in perfect conditions, the price of the company will not be influenced by the degree of the company's dividends as investor's worth is unresponsive to a declaration of big or small levels of shares.

The theory states that the firms' worth and the monetary effectiveness rely singly on the chances for venture accessible to it and not shares. Moreover, ease of use of finances to venture in valuable tasks. This means that, the firm can raise adequate resources externally and internally to finance equally its investments programs and dividends for a given set of investment opportunities. The theory support the notion that decisions on ventures should not be influenced by the payout of the dividends.

According to the theory, payments regarding dividends are rendered useless for the investors as to compensate for the shares, the firm has to allocate new dividends to accumulate the required resources. The price of the inventory will decrease in the same percentage to the share comensations due to the allocation of new stocks. Likewise, a fall in the value of stock and the payments for dividend will neutralize oneself (Modigliani & Miller, 1961). Therefore the managers should take more time running the resources of the company. But in a case of the investor, insignificance means that they are unconcerned between getting returns as the benefits of capital or as shares. A rise in the benefit for capital is shown by a decrease in dividend while a decrease in the benefit for capital is shown by a bigger share and the general profit is dissimilar in either case.

The study seeks to examine whether there is a considerable association between firm size, liquidity and earnings of a company and the decision on dividend payout. It is probable to deduce that dividends may contribute to greater profits if there is a strong association between the earnings obtained and the payments for shares. Even though Modigliani and Miller argue that dividend does not influence the earnings on profits, the study hence sought to test the applicability of the argument to the Kenyan context. Even though this research disregards the supposition that capital markets are ideal, which is a significant supposition, it tested the theory on the Kenyan NSE market.

2.1.3 Information Signaling Effect Theory

Stephen Ross (1977) advanced the theory arguing that dividends are relevant and that dividend strategy can be utilized by the management to signal some information to the market if the business is operating in an efficient market. For example, payment of high dividends by the management could indicate large projected

profits in the future to maintain a high dividend level while low dividends would show that the firm expects low profits in the future hence reducing the share price of the company.

Bhattacharya (1979) put forth some of the mainly recognized studies regarding signaling theories which stated that shares might serve as an indicator for anticipated prospective financial statements. A rise in the quantity of shares indicates that the managers look forward to greater financial statements in the coming years. The study though anchors on the supposition that outside shareholders have deficient information concerning the firms' prospective financial statements and the benefits of capital and also tax rates on dividends are higher than those of capital gains. According to Bhattacharya (1979), under these circumstances firms could opt to utilize dividends to potray positive indicators to their investors and outside shareholders by compensating for higher dividends. This move would however be irrespective of the fact that there is a tax disadvantage for dividends.

The application of the theory in the real world has necessitated into a pool of research which has resulted in varying ideas with repect to the use of signaling theory. A study by Asquith and Mullins (1983) for example, gave an empirical proof in support of the signaling theory stating that a rise in payments of dividend is inclined to raise the investors affluence and that dividends also contain information that is not accessible in other suppliers of information like bookkeeping information. Other studies, for example, Black (1976) and Pettit (1972) posits that the informational function of shares are overstated and that new less expensive ways of indicating the similar information to investors can be utilized.

This study seeks to determine whether the argument by Bhattacharya (1979) that raise compensation of dividend can work as a signal of greater financial statements in years to come thereby enhancing effectiveness, is realistic in the Nairobi securities exchange market. This study, therefore, sought to test the association between firm size, liquidity, earnings and payment of dividends.

2.2   Criticism of the Theories

The Dividend irrelevance theory which posits that the worth of the company will not be influenced by the degree of the company's shares has on the other hand encountered disapproval. The argument by Miller and Modigliani (1961) wont apply in a situation of induced capital market rationing because venture opportunities will be influenced a lot by the quantity of held income and in such situations payout of dividends openly influences investment. The suggestions were denied by Miller and Modigliani (1961) who posited that the necessary price of earnings is autonomous of dividend strategy.

Information signaling effect theory has been put into application in research which has resulted into varying ideas with respect to the use of the signaling theory. Some studies have given the practical instances in support of the signalling theory stating that a rise in the payments of dividend is likely to boost the shareholders affluence and that dividends also contain information that is not accessible from further resources of information like accounting information. Other studies such as that by Black (1976) and Pettit (1972) have however criticized this theory on grounds that the informational role of dividends are exaggerated and that other less expensive ways of signalling the same information to shareholders can be used. This theory also presupposes that dividends play a pivotal role in providing information signaling but fails to examine other related ways of signalling the same information to shareholders.

Dividend relevance theory considers firm dividends to be active variable influencing the worth of the company and subsequently financial performance of the firm. However, this theory has faced condemnation as it relaxes the supposition of ideal markets of capital and cogent investors. It analyses empirically the behavior patterns of dividend distributions and their effect on the value of the firm thereby disregarding the fact that in real world, market frictions are not costless and investors do not always act rationally.

2.3 Empirical Review

2.3.1 Firm Size and Dividend Policy

Ahmed & Fatima (2013) evaluated the determining factors of dividend policy. The study was performed on Pakistan non-financial sector and used a sample of 174 nonfinancial firms listed on Karachi Stock Exchange. The study used secondary data covering the period 2005 to 2010. Panel data and regression analyses were used in data analysis. The study results recognized firm size, profitability and tax, as most powerful determining factors of dividend policy, and that there is insufficiency of stable dividend policy in the market. This study focused on nonfinancial firms only; the proposed study shall focus on listed firms at NSE.

Velnampy, Nimalthasan & Kalaiarasi (2014) carried out a research study to establish the association between dividend payment and firm performance of listed manufacturing companies in Sri Lanka. Secondary data was used for the period of 2008 to 2012. Descriptive statistics, regression and correlation analyses were used to analyze the collected data. The study concluded that determining factor of dividend policy such as firm size is not correlated to dividend payout measures. Regression model showed that size of the firm does not influence companies return on asset and return on equity. Therefore this study thus supports the dividend irrelevance theory.

Mehdi, Mahdi & Shahnza (2014) examined the effects of dividends in relation to bate rate, firm size, price to earnings ratio, profitability, debt ratio and the rate of retained earnings. The population consisted of listed corporations as well as corporations that are not listed on the Tehran Stock Exchange. Secondary data collected for the period between 2010 and 2013 was analyzed using regression analysis and correlation analysis. The study established that there negative association between dividend and profitability. It was also found that there was no meaningful association between the dividend policy and rate of retained earnings. The study concluded that firm size had significant relationship with dividend payment in both the listed and non listed ones.

In their study, Murekefu & Ouma (2012) found a positive and significant relationship between dividend payout and the payment of dividend policy among the listed firms in Kenya. Specifically the study established that firm size had positive significant relationship with rate at which dividends are given to shareholders. The study also established that dividend payment policy is positively correlated with profitability as measured by return on investment. The research findings suggest that the average corporate dividend payout to stockholders for 40% of the firms is low and stable and that 28% of the firms quoted pay out high and stable dividends. This was attributed to the size of the firms as measured by total assets.

Shisia et al. (2014) undertook a study with the purpose to establish the impact of firm size on the dividend policies of companies quoted at the Nairobi Securities Exchange (NSE). The study used data from secondary sources. Random sampling technique was adopted to select a sample of 30 listed companies. Regression and correlation analysis was used to analyze data collected. The study found that there was statistical significant relationship between firm size, earnings per share and financial dividend policies. The study concluded that there is a substantial association between dividend pay-out ratio, firm size and dividend per share. This research study thus supports the theory of dividends relevance.

Bulla (2013) carried out an empirical analysis of selected factors affecting dividend policy of listed firms at the Nairobi Securities Exchange. The study sought to examine if and how dividend yield and firm size affect dividend policy of firms listed at the Nairobi Stock Exchange. His findings indicated that dividend yield and sales explained 17 percent of the variation in dividend policy. However, out of the 17 percent, earnings explained up to 15 percent representing 87 percent, while size and dividend yield explained about 2 percent. These results therefore, show that only accounting earnings is significant variable influencing dividend payout by listed firms at the NSE. Firm size and previous dividend paid are insignificant variables.

2.3.2 Liquidity and Dividend Payment

Anand (2014) sought to find out the determinants of the dividend policy decisions of the corporate India. The author collected secondary data for a period of 6 years, 2007 to 2012. The study used cross tabulations and Spearman correlations. The study concluded that both return on equity and return on assets are positively related to the dividend payout ratio and that growth in assets is not significant in determining the level of dividend to be paid. The study found that dividend policy dimensions such as firm liquidity had insignificant but negative relationship with the firm quest to pay dividends in India.

Attiya (2016) conducted a study on dynamics and determinants of dividend policy for financial listed firms in Karachi Stock Exchange of Pakistan. The study analyzed the secondary data by use of OLS regression analysis. The study found that liquidity of the firms has a positive influence on dividend payout thus confirming that firms with higher market liquidity pay more dividends. However, Anupam (2012) in his study of UAE firms found liquidity to have an insignificant influence on the dividend policy payout decisions.

Rozeff (2012) studied determinants of cash dividend policy for U.S. manufacturing companies for the period of 10 years, from 2000 to 2009. The researcher measured dividend policy by use of profitability ratios, liquidity ratios and companies' size. Their study used regression model as method for data analysis. The research findings confirm that profitability, liquidity, risk and company size on average, are important determinants of cash dividend policies. However, liquidity was found to have positive significant relationship with payment of dividends.

Abdul (2013) in her research based on empirical study to identify parameters which are important in the determination of dividends by publicly quoted companies collected data on the 36 companies from the various sectors listed at the Nairobi Stock Exchange. In her study she examined the relationship between dividends and the following parameters; Liquidity, Working capital, Investment and Cash flows. She analyzed the secondary data extracted from the annual financial statements of the 36 companies over a period of 8 years and obtained information relevant to the above parameters. In her conclusion upon data analysis, she confirmed that liquidity seems to be a very important variable among the companies listed at the NSE because 64% of the selected firms found this parameter to be significant in determining dividend payment which is consistent with Karanja's (2017) findings.

Odawo (2015) study sought to establish the determinants of dividend payout policy in public limited banks by examining the effect of liquidity, profitability, firm size and leverage on dividend payout. The study adopted a descriptive research design. The target population of the study was CFC Stanbic Bank where secondary data was for a period of eleven years (2003-2013). The data was analyzed qualitatively as well as quantitatively using both descriptive statistics and inferential statistics. The results showed that there liquidity was negatively (β = -1.0094) and significantly (p-value = 0.041) related to dividend payout policy. From the study findings it was recommended that; first, companies should maintain an optimal level of market liquidity as market liquidity has a negative influence on dividend payout.

Ngobe, Simiyu & Limo (2013) studied the relationship between dividend policy and stock price volatility for the period 1999-2008 at NSE using correlation and multiple regression analysis and concluded that dividend yield has a positive relationship with price volatility while liquidity has a negative relationship with price volatility, contrary to the findings of Ngunjiri (2011). These two studies only showed that payment policies had an impact on the stock price but did not suggest whether or not dividend payout itself had any relationship with financial performance of the companies.

2.3.3 Earnings stability and dividend payment

Abu (2012) studied the determinants of dividend payout policy among listed commercial banks in Bangladesh. The study found negative relationship between earnings per share and dividend payout, a positive

effect of net income on dividend payout and revenue (sales) to have no effect on dividend payout. The study concludes that dividend payout of commercial banks in Bangladesh is dependent more on current earnings than on any other variable that affects dividend policies.

Partington (2015) investigated in the determinants of the payment of dividends among firms in Australia. The author studied 84 listed companies in Australia and found that the main factors that determine dividend payout decision are stability of earnings and profitability. Baker, Mukherjee & Pakelian (2015) support these findings since their study established that earnings have statistical significant relationship with the dividend payment. The study concluded that an increase in the stability of earnings result to higher dividend payout to the shareholders. The findings affirmed the earlier study that they carried out in 2005.

Lintner (2016) surveyed corporate chief executive officers and chief financial officers and found that dividend policy is an active decision variable because managers believe that stable dividends lessen negative investor reactions. The active determination of dividend policy implies that the level of retained earnings and savings is a dividend decision by product. Turnovsky (2017) find empirical support for Lintner's findings; dividends are a function of current and past profit levels, and expected future earnings, and are negatively correlated with changes in the level of sales.

Yegon, Cheruiyot & Sang (2014) research was to establish the factors affecting dividend policy of the 10 listed commercial banks in Kenya. The research used secondary data obtained from banks audited financial statement. To achieve this objective data from 10 listed commercial banks was analyzed for the period of five years (2011-2015). The research was a census study and it adopted a descriptive design. Regression was used to show the effect of dividend per share, asset quality, capital adequacy, liquidity management and size on the dividend payout and correlation analysis was employed to determine the association of the factors in the model. The research findings showed that earnings had a weighty affirmative influence on the dividend payout of the listed commercial banks. From the research findings, the study recommends that commercial banks and other sectors should invest in profitable assets that will yield higher earnings returns in the future to enhance their enhance dividend payment and attract more profitable investments.

One of the most comprehensive studies done in Kenya was by Karanja (2017). His study was based on the dividend practices of public quoted companies in Kenya. He collected data through the use of a questionnaire and obtained information about the kind of dividend policies managers of the quoted companies pursued. Of relevance in the study is that he obtained data on the major determinants of dividend policy in Kenya. He found three factors to be the most important. These were stability earnings, liquidity position and company's level of distributable resources. He also observed that foreign controlled companies have more liberal dividend policies than locally controlled firms due to their stability in earnings. This study will partly focus on corroborating evidences that will validate Karanja's findings as well as seek to statistically test the significance of other variables that were not addressed by his study.

2.4 Knowledge Gaps

A number of past empirical studies on dividend policy have also been reviewed, the studies posted mixed reactions and conclusions. Some studies indicate that dividend policy is relevant; Murekefu & Ouma (2012) found a positive and significant relationship between dividend payout components and the performance of listed firms in Kenya. Mehdi, Mahdi & Shahnza (2014) research findings confirm that company size has significant association with performance. Other studies have observed an inverse relationship between dividends and firm performance such as Anupam (2012) in his study of UAE firms found liquidity to have an insignificant influence on the dividend policy payout decisions. Bulla (2013) study reports that only earnings have a significant influence on dividend payout for the listed firms at the NSE. Firm size and previous dividend paid are insignificant variables. This lack of unanimity indicates a need for further research on the proposed study topic; hence this study asks the question, what are the factors determining dividend payment among companies listed on the Nairobi Security Eexchange, so as to compare the findings with that of other

studies in other economies as well as Kenyan perspective. Again, a geographical knowledge gap arises when a study is conducted in a different geographical area with different conditions from those of another similar study. Since most of these studies were conducted in developed economies, the findings cannot be generalized to Kenya due to the fact that the macro economic conditions of those economies are different from Kenya. Based on the aforementioned inconsistent, mixed and inconclusive results, the study at hand therefore joins the debate to bridge the existing gaps and provide recommendations thereof.

3.0 RESEARCH DESIGN AND METHODOLOGY
3.1 Research Design
Research design is the conceptual structures within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data (Selttiz, Wrightsman & Cook, 2012). This study adopted descriptive study design. A descriptive study design is mainly concerned with the description of facts only (Upagade & Shende, 2013). It allows the researcher to gather information, summarize, present data and interpret it for the purpose of clarification as it asks the who, what, where, when and how questions (Creswell, 2003). Descriptive study design was appropriate for this study because it allowed for description of the current situation involving the dividend payment among companies listed at NSE. The present situation is that firms have different dividend policies and also pay different amounts of dividends based on different factors. The study sought to investigate the factors that determine dividend payment among companies listed on the NSE.

3.2 Target Population
Target population is that population to which a researcher wants to generalize the results of the study. The target population of the study was 66 financial and non-financial firms listed on the Nairobi Securities Exchange as at 31st December 2016. There are 12 sectors under which all the 66 listed firms fall into. The population period was the times between the first listing and December 2016. The sectors are Agricultural Sector, Automobiles Sector, Banking Sector, Commercial Services Sector, Construction and Allied Sector, Energy and Petroleum Sector, Insurance Sector, Investment Services Sector, Investment Sector, Manufacturing and Allied Sector, Telecommunications sector and Real Estate Investment Sector. Table 3.1 indicates the population distribution.

Table 3.1: Target Population

Sector	Population	Percentage
Agricultural Sector	6	9
Automobiles Sector	3	5
Banking Sector	11	17
Commercial Services Sector	11	17
Construction and Allied Sector	6	9
Energy and Petroleum Sector	5	8
Insurance Sector	6	9
Investment Services Sector	2	3
Investment Sector	5	8
Manufacturing and Allied Sector	9	14
Telecommunications sector	1	2
Real Estate Investment Sector	1	2
Total	**66**	**100**

Source: NSE Handbook (2016)

3.3 Sample and Sampling Procedures

A sample is a subset of a population and it represents the entire population (Wilson, 2014). Mugenda and Mugenda (2008) argued that a sample can form between 10% and 30% of the entire population. Based on this argument, the study focused on a sample size of 15% of the entire population since in line with Mugenda and Mugenda (2008). The sample period was 2007 – 2016. The study chose the period because some companies were found not to have updated their websites , as such 2017 lacked key data for the study , hence the decision by the researcher to consider data for up to 2016. Data was gathered only for companies that have complete data for sample period. The study only selected companies listed at NSE that pay dividends to shareholders. The researcher, therefore, sampled 15% of the target population as shown in table 3.2.

The researcher adopted stratified random sampling as the sampling procedure. In order to achieve the right sample size, the researcher sub divided the entire population into different subgroups or strata as per sector distribution. The final subjects was selected proportionally and randomly selected from the different strata ones each company had been grouped as per sector. The researcher then differentiated each firm in a particular sector with a specific number. The researcher, therefore, picked every K^{th} number to represent sample size of the entire population as per percentage sample size. The aim of choosing this method was because it captured key population characteristics in the sample in this case the variation in population as per sector distribution (Chen and Volpe, 2011). In order for a sample to be random, all firms in the population had an equal opportunity to be present in the sample each time a sample was drawn hence the preference for this research method in the current study. The choice of 15% sampling for each sector is justified due to the fact that it fall within the 10-20% threshold as asserted by Moher, Dulberg and Wells (2017). Again the sample size is justified because the researcher believes that 15% of entire population as per sector is appropriate in providing useful information for the success of this study. The sampling frame is shown in table 3.2 below.

Table 3.2 Sample Size

Sector	Population	Sample Size (15% of Population)
Agricultural Sector	6	1
Automobiles Sector	3	1
Banking Sector	11	2
Commercial Services Sector	11	2
Construction and Allied Sector	6	1
Energy and Petroleum Sector	5	1
Insurance Sector	6	1
Investment Services Sector	2	1
Investment Sector	5	1
Manufacturing and Allied Sector	9	1
Total	**66**	**12**

Source: Computation by the Researcher

3.4 Data Collection Procedures

The study utilized data from secondary sources. Data collection procedure, therefore, entailed extraction of data from the annual reports and financial statements of the financial firms listed on the Nairobi Securities Exchange for the study period. Secondary data can be obtained from the NSE Handbook for the study period.

3.5 Data Analysis Procedures

Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. Shamoo and Resnik (2014) argue that various analytic procedures provide a way of drawing inductive inferences from data and distinguishing the phenomenon of interest from the statistical fluctuations present in the data. The collected data was analyzed using descriptive and inferential statistics.

3.5.1 Descriptive Statistics

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

Descriptive statistics include percentages, frequencies, means, and standard deviations while inferential statistics include regression and correlation analysis. SPSS was used for analysis. The analyzed results were presented in form of diagrams and graphs. The data was tested and treated for the problems of Panel data. These tests are discussed in the following subsections.

3.5.2   Test for Multicollinearity

In statistics, multicollinearity (also collinearity) is a phenomenon in which one predictor variable in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy. The test for Multicollinearity was conducted to establish whether the independent variables are correlated. A correlation matrix as well as the variance inflation factors method was used to establish whether Multicollinearity existed. A variance inflation factor above 10 signifies presence of multicollinearity (Kock & Lyne, 2012).

3.5.3   Test of Stationarity

A stationary time series is one whose statistical properties such as mean, variance, autocorrelation, are all constant over time. Since the data to be used in the study has the aspect of time, the study tested for the stationarity of the data by using Unit roots test. The presence of a unit root was tested by using Im-Pesaran-Shin (IPS) test. Of the popular panel unit roots tests (Levin Lin Chu (LLC) and Im-Pesaran-Shin (IPS)), the LLC test is of limited use, because the null hypothesis and the alternative hypothesis are so strict that it is not realistic in practice (Kromtit & Tsenkwo, 2014). Im, Pesaran and Shin (2003) states that IPS test is more powerful than the LLC test.

According to Im, Pesaran and Shin (2003), the performance of the LLC test is the worst. A better suggestion is the IPS test because although the two tests exhibit size distortion and low power under cross-sectional dependence, the IPS test generally performs better than the LLC and hence the study used IPS test in conducting testing for unit roots (Kromtit & Tsenkwo, 2014).

The presence of non stationarity (unit roots), was solved by differencing the variables that was stationary. A first difference was conducted and afterwards unit root test conducted on the differenced set again. The first difference achieved stationarity on the variable thus no need for conducting a second difference. The stationary data was then be used to establish the short run effects of dividend policy on performance of listed firms.

3.5.4   Test for Normality

Normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. The residuals of regression models should be normally distributed and the study will therefore use the graphical method (Histogram) and Jarque-Bera test for normality. This is to ascertain whether the variables used in the analysis are normally distributed (Field, 2009).

Under the null hypothesis of a normal distribution, the Jarque-Bera statistic is distributed with 2 degrees of freedom. The reported Probability is the probability that a Jarque-Bera statistic exceeds (in absolute value) the observed value under the null a small probability value leads to the rejection of the null hypothesis of a normal distribution (Field, 2009). The data was found to be normally distributed.

3.5.5   Serial Correlation

Serial correlation (also called Autocorrelation) is where error terms in a time series transfer from one period to another. In other words, the error for one time period *a* is correlated with the error for a subsequent time period *b*.

Serial correlation exists when there is a correlation among the error terms due to changes in time. The data was collected over a period of time and hence there was a need to test for the presence of first order serial autocorrelation. The study used Wooldridge Test of Autocorrelation. The null hypothesis of the test is no first order correlation. If the p-value is significant (p-value < 0.05) then the null hypothesis is rejected (Freeman *et al.,* 2009). There was no presence of serial autocorrelation as such there no need to run a regression model using robust standard errors.

3.5.6   Heteroscedasticity

It occurs if different observations' errors have different variances. It's present when the size of the error term differs across values of an independent variable. There is a need to ensure that the residuals of the regression model are constant across time and hence the study will use Likelihood Ratio Test of Heteroscedasticity. The test has null hypothesis which states that the error term are Homoscedastic. If the Prob > chi^2 value is significant (Less than 0.05), the null hypothesis is rejected (White, 1980).

The presence of Heteroscedasticity can be corrected by running a regression model using robust standard errors. Robust standard errors can be achieved by using white test.

3.5.7 Hausman Specification Test

The Hausman Test (also called the Hausman specification test) detects endogenous regressors (predictor variables) in a regression model. To decide whether to use the random effect model or fixed effect model, the study used Hausman specification test. Fixed effect model is used to analyze the impact of variables that vary over time (Green, 2008). The fixed-effects model controls for all time-invariant differences between the individuals, so the estimated coefficients of the fixed-effects models cannot be biased because of omitted time-invariant characteristics. Unlike the fixed effects model, the variation across entities in Random effect model is assumed to be random and uncorrelated with the predictor or independent variables included in the model (Green, 2008).

The null hypothesis for Hausman test states that the difference between the coefficients is not consistent. If the value for prob>chi^2 is greater than p value of 0.05, then the study used a fixed effect model (Green, 2008).

3.5.8 Panel Co-integration Test

This test evaluates the null against both the homogeneous and the heterogeneous alternatives.

Testing for co-integration involves checking whether a dynamic relationship between variables exists. Variables may exhibit co movement because of sharing a trend line, and this may end up being represented by a high r squared. However, a high r squared is not a sufficient condition to conclude that a true relationship exists. Spurious relationships may therefore exist from data that has common trends. It is therefore important to test the existence of a true relationship through applying co-integration tests. This study used the Johansen Co-integration test to establish whether a co-integration relationship exists among the variables. An error correction model was used to correct the problem and establish short term relationship (Elmi, & Sadeghi, 2012).

3.5.9 Analytical Model

Data that had been tested and treated for the problems of Panel data was analyzed by the following analytical model.

The general model was as follows; $Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon$

Financial performance (ROA) $= \beta_0 + \beta_1$ (**Firm size**) $+ \beta_2$ (**Liquidity**) $+ \beta_3$ (**Earnings**) $+ \varepsilon$

Where

Y_{it}	=	Return on Assets on firm i at time t
X_{1it}	=	Firm size of firm i at time t
X_{2it}	=	Liquidity of firm i at time t f
X_3it	=	Earnings of firm i at time t
ε	=	error term for the model
i	=	1 to 12, number of firms in the sample
t	=	2007 to 2016

$\beta_1, \beta_2, \beta_3,$ and β_4 are coefficients attached to each explanatory variable, and they explain the marginal effects of each variable on the dependent variable (Returns on Assets). β_0 is the constant term (Returns on Assets when independent variables are not included)

4.0 DATA ANALYSIS AND PRESENTATION

4.1 Descriptive Statistics

The study was interested in obtaining data about the firm size, liquidity, earnings and return on asset of the 12 listed firms for a period of ten (10) years. The obtained data was analyzed using descriptive statistics and the results are as shown in Table 4.1.

Table 4.1: Descriptive Statistics

	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis	Jarque-Bera	Prob
Size	120	20.80	26.38	23.8457	1.51238	-.120	1.187	7.068	0.011
Liquidity	120	.27	10.36	2.3727	2.61387	1.919	2.383	123.8965	0.013
Earnings	120	-6.04	13.95	.2109	1.98632	3.544	21.966	9.0976	0.000
FCFE	120	-.42	5.90	1.7127	1.01364	.865	1.683	221.902	0.201
Valid N (listwise)	120								

The results in table 4.1 above shows the Jarque-Bera test tests of the null hypothesis of normality versus non-normality. The study shows that the probability results for firm size was 0.011, probability results for liquidity was 0.013, probability results for earnings was 0.000 while probability results for Free Cash Flow to Equity was 0.021. evidently all the p-values of the variables are less than 0.05 which is, therefore, a pointer that the Jarque- Bera values are significant at 5% level of significance as such the null is rejected and conclude that firm size, liquidity, earnings and FCFE are not normally distributed. The results for Skewness for firm size, liquidity, earnings and FCFE shows that the variables have a negative skewness. The Kutosis values of all the variables indicate that they have positive Kurtosis. Therefore, all the variables under study are not normally distributed.

4.2 Multicollinearity Tests

The study also tested for the multicollinearity of independent variables using VIF. The results in are presented in Table 4.2 below.

Table 4.2: Multicollinearity

Variable	VIF	1/VIF = Tolerance
Firm size	14.94	0.066950
Liquidity	14.76	0.067729
Earnings	9.31	0.107423
FCFE	8.23	0.121555
Mean VIF	11.81	

The results in Table 4.2 show that some of the independent variables indicate a VIF>5, an indication of multicolliniarity. In a nutshell, firm size has a VIF of 14.94; liquidity has a VIF of 14.76, earnings have found to have a VIF of 9.31 whereas return on asset has VIF of 8.23. The findings could be interpreted to imply that multicollinearity is a concern as indicated by the data for the twelve listed firms that were selected from each of the twelve studied sectors. The results resonates with another study by Mehdi, Mahdi & Shahnza (2014) who used liquidity, firm size, age and earnings and found that multicollinearity is not a concern among Jordanian firms between the year 2010 and 2014

4.3 Test for Stationarity

The time series analysis began with the investigation of the time series properties of each variable employed in the study by using both the Augmented Dickey Fuller (ADF) test for stationarity. This is because when non-stationary time series data are used for analysis, the study may end up with spurious results because estimates obtained from such data possess non-constant mean and variance. Stationarity of a time series is when the mean, variance and covariances are time invariant. The researcher then performed Augmented Dickey Fuller (ADF) unit root tests to confirm the stationarity of the time series. The study findings in Table 4.3 show that variables were not stationary in their original form since the ADF statistic was less than the entire critical statistic except for liquidity. The researcher therefore differenced the data to achieve stationarity as shown in the table 4.3.

Table 4.3: ADF Unit Root Test Results at Level and First Difference

		Level 1	Level 2		First Diff	First Diff	Probability
Variables	ADF Test statistics	1%	5%	ADF Test statistics	1%	5%	5%
Firm size	-2.297	-3.58	-2.93	-5.978	-3.587	-2.933	0.002
Liquidity	-1.744	-3.58	-2.93	-5.018	-3.587	-2.933	0.032
Earnings	-3.504	-3.58	-2.93	-3.922	-3.587	-2.933	0.000
FCFE	-1.39	-3.58	-2.93	-6.653	-3.587	2.933	0.025

The results in Table 4.3 show the results of the ADF test after the data is differenced once. After differencing once the results show that all the variables were stationary. The data is stationary if the absolute value of ADF test statistic is less than the critical values. In summary, all the variables in levels firm size, liquidity, earnings, and FCFE are found to have a single unit root and are stationary at first differences at 5% levels of significance. The results can be interpreted to mean that all the null hypotheses are rejected in favor of the alternative that the panel is stationary at first difference levels. The study results are in agreement with another study by Attiya (2016) who conducted a study on dynamics and determinants of dividend policy for financial listed firms in Karachi Stock Exchange of Pakistan and found that all the variables had a single unit root tests.

4.4 Normality Tests for Dividend Policy

The study conducted normality test to ascertain whether the variables regarding dividend payment (firm size (total assets), liquidity, earnings and FCFE) were normally distributed. The results are shown in Table 4.4 and Figure 4.1 below. The results in table 4.4 shows that the variables were normally distributed since their P-values were greater than 0.05 (5% significant levels).

Table 4.4: Normality tests

```
sktest size liquidity earnings FEFC
```

Skewness/Kurtosis tests for Normality

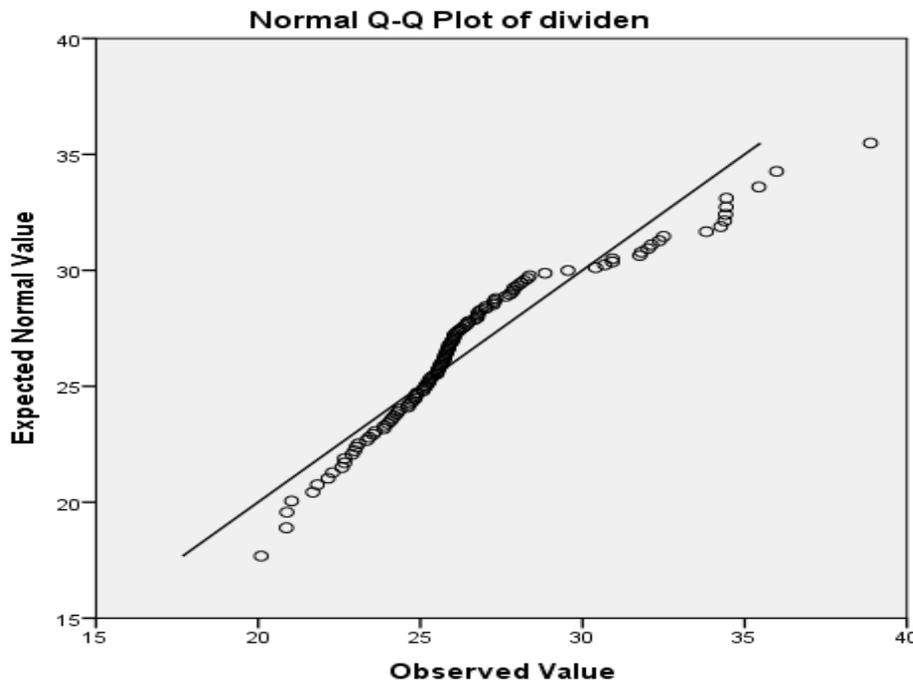| Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
totalassets	88	0.1360	0.1220	5.21	0.1442
Liq	88	0.3549	0.0975	3.72	0.0657
earn	88	0.8010	0.0600	16.08	0.0703
fecf	88	0.0958	0.0730	9.91	0.1070

Figure 4.1: Normality Tests for Dividend Policy

The results in Figure 4.1 also affirm that all the variables were normally distributed. The normal Q-Q plot, therefore, affirms that the variables are normally distributed in this study thereby concluding that there is no problem of normality on the model since their distribution appears near the diagonal line. The results contradicts another study by Rozeff (2012) who studied determinants of cash dividend policy for U.S. manufacturing companies for the period of 10 years, from 2000 to 2009. The study found that the variables were not normally distributed (they were not scattered along diagonal line).

4.6 Serial Correlation Tests
The study then used the Durbin Watson test to check for serial correlation of the residuals. The Durbin Watson statistic of 0.0816768 which was less than 2 is an indication that there is no problem of serial correlation. In agreement, Odawo (2015) study found that there was problem of serial correlation in all the variables. The results are shown in table 4.4 below.

Table 4.4: Serial Correlation Tests

Durbin Watson d-Statistic
(5, 52) = 0.0816768
H_0 : No autocorrelation.

4.7 Heteroscedaticity Test
The study then investigated the data for residual variance stability. When variances of residuals are not constant, there is a problem of heteroscedaticity. The study used the Breusch-Pagan test to test the null hypothesis that residuals have constant variance. From the results, study accept the null hypothesis since p>0.05 and concluded that the residuals were not heteroscedastic. The results are shown in table 4.5

Table 4.5: Heteroscedaticity Test

Breusch-Pagan Test
Chi2(1) = 0.75   Prob> chi2 = 0.3870
H_0 : No Heteroscedasticity.

The results show that the p-value > 0.05. The study, therefore, accepted the H_O of no heteroskedasticity. The CLM assumption is violated which implies that there is need to perform the time series analysis for cointegration.

4.8 Cointegration Test

The study sought to determine the long run relationship among variables. A test for series for cointegration was, therefore, performed. According to the Granger representation theorem, if the series are cointegrated, then there is a corresponding error correction term which then requires an error correction model. The first step is to examine the order of integration of each variable such that if the series are integrated of order one then, the Johansen procedure was used to test existence of any cointegrating vector among variables. The series are I(1), therefore, there is need to proceed to test for cointegration using the Johansen cointegration test. The researcher tested the null hypothesis that there are r=0 cointegrating vectors against the alternate that there is at least one cointegrating vectors. The researcher then proceeded to determine the number of cointegrating equations. When the trace statistics is less than the critical value, we accept the null hypothesis of no cointegration and vice versa.

Table 4.6: Johansen Cointegration Test

```
                    Johansen tests for cointegration

Trend: constant                                Number of obs =     49
Sample:  1966 - 2014                                    Lags =      2
_____
                                                         5%
maximum                                    trace    critical
  rank    parms       LL     eigenvalue  statistic   value
    0       30     1086.629        .      152.2330    68.52
    1       39     1113.6943   0.66869     98.1024    47.21
    2       46     1135.2589   0.58530     54.9731    29.68
    3       51      1150.986   0.47372     23.5190    15.41
    4       54     1158.7588   0.27186      7.9734     3.76
    5       55     1162.7455   0.15017
_____
```

From the table 4.6 above, there is cointegration of order four since it's the last order where trace statistics at r=0 exceed critical value. We reject the null hypothesis of no cointegrating equation. Since there is presence of positive cointegration, there is no need to conduct Vector Error Correction Model. In Partington (2015), the

author investigated the effect of firm dividend policies on the financial performance of firms in Australia and found accepted the null hypothesis since there was presence of cointegration.

4.9 Regression Results
The variables were regressed to determine the causal relationship between dividend payment and companies listed at the NSE. The regression model was given as:

Dividend payment= $\beta_0 + \beta_1$ (**Firm size**) + β_2 (**Liquidity**) + β_3 (**Earnings**) + β_4 (**FEFC**)

+ε

Table 4.7: Regression Results

Variable	Coefficient	Std Error	t-statistic	Probability
Dependent Variable	Dividend policy			
Firm size	0.992	0.011	94.112	0.005
Liquidity	0.991	0.006	162.371	0.000
Earnings	1.002	0.008	124.988	0.000
FEFC	0.019	0.924	110.921	0.009
Constant	0.370	0.253	1.462	0.146
R-Squared	0.948	0.17354		
Adjusted R-squared	0.864	0.17354		
F statistic	15873.987			
Prob(F Statistic)	0.000[b]			

The results of the study show that all the model coefficients are positive. The results imply that a unit increase in firm size will result into a 0.992 change in the dividend payment. The findings further show that unit change in liquidity will result into a 0.991 change in dividend payment. The study findings show that a unit change in earnings will result into a 1.002 change in the dividend payment. Finally, the findings show that a unit changes in return on asset will result into a 0.019 change in the dividend payment. The fact that all the variables have p-values of less than 0.01 is an indication that they have statistical significant relationship with dividend payment of the selected firms. The findings mean that all the policy dividend indicators have a positive influence on the financial performance. The findings are affirmed by another study carried out by Odawo (2015) who sought to establish the determinants of dividend payout policy in public limited banks by examining the effect of liquidity, profitability, firm size and leverage on dividend payout. The study found that all the variables upon subjected to regression analysis had statistical and significant positive association with the firms' financial performance.

4.9.1 Firm size and dividend payment
The first objective of the study sought to find out how firm size determines dividend payment among companies listed on Nairobi Securities Exchange. From the findings the t-test statistic of 94.112 for firm size had a probability (p) value of 0.005 (> 0.05) and therefore statistically significant at 5% significance level. Therefore, the study found a positive significant relationship between firm size and payment of dividends in Kenya.

4.9.2 Liquidity and dividend payment

The second objective of the study sought to establish how liquidity determines dividend payment among companies listed on Nairobi Securities Exchange. From the findings the t-test statistic of 162.371 for firm size had a probability (p) value of 0.000 (> 0.05) as such it was statistically significant at 5% significance level. Therefore, the study found a positive significant relationship between liquidity and payment of dividends in Kenya.

4.9.3 Earnings stability and dividend payment

The third objective of the study sought to assess how stability earnings determines dividend payment among companies listed on Nairobi Securities Exchange. Based on the findings the t-test statistic of 124.988 for stability earnings had a probability (p) value of 0.000 (> 0.05) as such it was statistically significant at the 5% significance level. Therefore, the study found a positive significant relationship between liquidity and payment of dividends in Kenya.

4.9.4 Goodness of fit

As presented in the regression results, the model had R^2 of 0.948, actually it was 94.8%. This could be interpreted to mean that 94.8% of the variation in the payment of dividends by companies listed at the NSE can be explained by the variables under study. The rest of the variation of 5.2% can only be explained by other factors or variables that were not used by the study. Further, the adjusted R-squared of 0.864 (86.4) shows that the model had a good predictive power in using the independent variables to explain the dependent variable. The F-statistic for the model was 15873.987 with a probability value of 0.0000 which was less than 0.05 and this shows that the model as a whole was significant in predicting the payment of dividends by listed companies.

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The focus of the study was based assessing factors determining dividend payment among companies listed on Nairobi Securities Exchange. The study used descriptive statistics, multicollinearity tests, stationarity tests, normality test, serial correlation, heteroscedasticity, panel co-integration test, and analytical model (regression analysis).

In relation to multicollinearity tests, the study established that multicollinearity is a concern as indicated by the fact that all variables for the twelve listed firms that were studied had a VIF>5. The study also found that all the variables subjected to ADF test were stationary after the data is differenced once. In summary, all the variables in levels of firm size, liquidity, earnings, and FEFC are found to have a single unit root and are stationary at first differences at 5% levels of significance.

Upon subjecting data to normality tests, normal Q-Q plot affirmed that the variables were normally distributed which, therefore, led to a conclusion that there was no problem of normality on the model since their distribution appeared near the diagonal line. The study then used the Durbin Watson test to check for serial correlation of the residuals. The Durbin Watson statistic was less than 2 which was an indication that there was no problem of serial correlation.

The study tested homoscedasticity by use of Breusch-Pagan test to test the null hypothesis that residuals have constant variance. From the findings, the null hypothesis was accepted since p>0.05, an indication that the residuals were not heteroscedastic. Regarding cointegration, the study established that there was a cointegration of order four; this, therefore, implies that the null hypothesis of no cointegrating equation was rejected.

Concerning multiple regression analysis, the study found that all the model coefficients were positive which, therefore, implied that the variables have statistical significant relationship with the payment of dividends among the selected firms. The findings mean that all the dividend payment variables have a positive influence on the payment of dividends among listed firms at the NSE.

5.2 Conclusions

The first objective of the study sought to find out how firm size determines dividend payment among companies listed on Nairobi Securities Exchange. From the empirical analysis the study found that there was positive significant effect firm size on the payment of dividends. Therefore, the study concluded that firm size had a single unit root and was stationary at first differences at 5% levels of significance. It was also concluded that the variables firm size was normally distributed since its distribution appeared near the diagonal line. By use of Durbin Watson statistic, the study concluded that there was no problem of serial correlation. The study also concluded that the null hypothesis of no heteroscedaticity was accepted, an indication that the residuals were not heteroscedastic. Regarding cointegration, the null hypothesis of no cointegrating equation was rejected. Concerning multiple regression analysis, the study concludes that firm size had statistical positive significant relationship with payment of dividends.

The second objective of the study sought to establish how liquidity determines dividend payment among companies listed on Nairobi Securities Exchange. From the findings, the study found that there was positive significant effect of liquidity on the payment of dividends by the companies. Therefore, the study concluded that firm size had a single unit root and was stationary at first differences at 5% levels of significance. The study concluded that the variable had no problem of serial correlation. The study also concluded that the residuals of liquidity were not heteroscedastic. Regarding cointegration, the null hypothesis of no cointegrating equation was rejected. Concerning multiple regression analysis, the study concludes that liquidity had statistical positive significant relationship with payment of dividends.

The third objective of the study sought to establish how earnings determine dividend payment among companies listed on Nairobi Securities Exchange. From the findings, the study found that there was positive significant effect of earnings on the payment of dividends by the companies that were studied. Therefore, the study concluded that firm size had a single unit root and was stationary at first differences at 5% levels of significance. The study concluded that the variable had no problem of serial correlation at all. Regarding cointegration, the null hypothesis of no cointegrating equation was rejected. Concerning multiple regression analysis, the study concludes that earnings had positive significant relationship with payment of dividends.

5.3 Recommendations

Based on the findings, the following recommendations were arrived at;

The first objective of the study sought to find out how firm size determines dividend payment among companies listed on Nairobi Securities Exchange. The study recommends that the firm size of the firm should be expanded since an increase in the firm size would imply that the company has a potential of an increase market share and thus would reap more profits and as a result be in a position to pay dividends to its shareholders.

The second objective of the study sought to find out how liquidity determines dividend payment among companies listed on Nairobi Securities Exchange. The study recommends that companies should maintain an optimal level of market liquidity as market liquidity has a positive statistical influence on dividend policy. Maintenance of optimal level of market liquidity will thus help in increasing the payment of dividends by the companies listed on NSE.

The third objective of the study sought to find out how earnings determines dividend payment among companies listed on Nairobi Securities Exchange. It is also recommended that since earnings has a positive

and significant statistical influence on dividend payment then companies should strive to engage in profitable ventures so as to be in a position to pay dividends to the shareholders which is a return for their investments.

REFERENCES

Abdul, F. (2013). An Empirical Study to Identify Parameters Which are Important in the Determination of Dividends by Publicly Quoted Companies, MBA Project, University of Nairobi.

Abor, J., & Fiador, V. (2013). Does corporate governance explain dividend policy in Sub-Saharan Africa? *International Journal of Law and Management*, *55*(3), 201-225.

Abu, S. (2012). Determinants of dividend payout policy: Evidence from Bangladesh, *International Journal of Economic Practices and Theories*, 2(3)

Ahmed, A., & Fatima, A. (2013). Determinants of Dividend Policy. A Sectoral Analysis from Pakistan. *International Journal of Business and Behavioral Sciences,* 3(9), 16-33.

Adediran, S. A., & Alade, S. O. (2013). Dividend policy and corporate performance in Nigeria. *American Journal of Social and Management Sciences*, *4*(2), 71-77.

Agyei, S. K., & Marfo-Yiadom, E. (2013). Dividend policy and bank performance in Ghana. *International Journal of Economics and Finance*, *3*(4), 202.

Agyemang Badu, E. (2013). Determinants of Dividend Payout Policy of listed Financial Institutions in Ghana.

Alli, K., Khan, A., & Ramirez, G. (2017). Determinants of dividend policy: a factorial analysis. *The Financial Review, 28*(4), 523-47.

Al-Malkawi, H. A. N., Rafferty, M., & Pillai, R. (2013). Dividend policy: A review of theories and empirical evidence. *International Bulletin of Business Administration*, *9*(9), 171-200.

Amidu, M., & Abor, Joshua. (2013) 'Determinants of Dividend Payout Ratios in Ghana,' *Journal of Risk Finance,* Vol 7,

Asquith, P., & Mullins, D. W. (1983). The Impact of Initiating Dividend Payments on Shareholders' Wealth. The Journal of Business, 56 (1), 77-96.

Attiya, Y. (2016). Determinants of dividend policy in Pakistan. *Journal of finance, 2*(5), 11-34

Baker, H. K., Mukherjee, T. K., Pakelian, O.G. (2015). How Norwegian Managers View Dividend Policy", *Department of Economics and Finance Working Papers,* 1991-2006. No. 48

Bhattacharya, S. (1979). Imperfect Information, Dividend Policy, and 'The Bird in the Hand' Fallacy. - The Bell Journal of Economics, 10 (1), 259-270.

Black, F. (1976). The dividend puzzle. *Journal of Portfolio Management*, 2 (2), 5-8.

Brealey, R. A., Myers, S. C., Allen, F., & Mohanty, P. (2012). *Principles of corporate finance*. Tata McGraw-Hill Education.

Chen, H., & Volpe, R. P. (2011). An analysis of personal financial literacy among college students. *Financial services review*, 7(2), 107-128

Elmi, Z. M., & Sadeghi, S. (2012). Health care expenditures and economic growth in developing countries: panel co-integration and causality. *Middle-East Journal of Scientific Research*, 12(1), 88-91.

Elgammal, W. (2014). Determinants of Dividend Payout Ratio: Evidence form MENA region. In *Third Asian Business Research Conference* (p. 65).

Fama, E (1974). Disappearing dividends: Changing firms characteristics or low propensity to pay?.*Journal of Finance Economics,* 60(1)3- 4

Field, A. (2009). Discovering statistics using SPSS. Sage publications.

Fumey, A., & Isaack, D. (2013). Dividend payout ratio in Ghana: Does the pecking order theory hold good? *Journal of Emerging Issues in Economics, Finance and Banking* 2(5), 99-133

Gitau, J. (2012). *The relationship between dividend payment and share price for companies listed at the NSE.*

Gordon, M. (1959). Dividends, Earnings and Stock Prices. *Review of Economics and Statistics, 99-105*

Karanja, J. (2017). The dividend Practices of Publicly Quoted Companies in Kenya, Unpublished MBA Project, University of Nairobi.

Koller, T., Goedhart, M., & Wessels, D. (2012). Valuation: measuring and managing the value of companies, 499. John Wiley and sons.

Kumaresan, S. (2014). Impact of dividend policy on shareholders wealth, a study of listed companies in hotels and travels sector of Sri Lanka. *International journal of Technological exploration and learning (IJTEL), 3*(1), 2319-2135.

Kuria, J. N. (2014). *A study on dividend policies, growth in assets, return on assets and return on equity at the Nairobi stock exchange.* Nairobi: University Of Nairobi.

Lease, R. C., John, K., Kalay, A., Loewenstein, U., & Sarig, O. H. (2000). *Dividend policy: It's impact on firm value*. Massachusetts: Harvard Business School Press.

Lintner, J. (2016). Distribution of Incomes of Corporations among Dividends, Retained Earnings and Taxes, *The American Economic Review,* 97 –113.

Malik, F., Gul, S., Khan, M. T., Rehman, S. U., & Khan, M. (2013). Factors influencing corporate dividend payout decisions of financial and non-financial firms. *Research Journal of Finance and Accounting*, *4(1), 35-46.*

Marekia, A. M. (2015). The effect of dividend announcement on share prices of firms listed at the Nairobi securities exchange (Doctoral dissertation, University of Nairobi).

Masara, E. N. (2015). *The relationship between dividend payout and the value of Commercial Banks listed at the Nairobi securities exchange* (Doctoral dissertation, University of Nairobi).

Mehdi. M., Mahdi. S., & Shahnaz.H. (2014). Factors Affecting Dividend Policy. Empirical Evidence of Iran

Mbuki, C. (2014). *Factors that determine dividend payout ratio among Sacco's in Kenya* (Doctoral dissertation).

Miller, M., and F. Modigliani (1961). Dividend Policy, Growth and the Valuation of Shares, *Journal of Business* 34, 411-433.

Mirza, H. H., & Azfa, T. (2013). Ownership structure and cash flows as determinants of corporate dividend policy in Pakistan*. International Business Research, 3(3), 210-221.*

Mirza, H. H., & Azfa, T. (2013). Ownership structure and cash flows as determinants of corporate dividend policy in Pakistan. *International Business Research*, *3(3), 210-221.*

Moher, D., Dulberg, C. S., & Wells, G. A. (2017). Statistical power, sample size, and their reporting in randomized controlled trials. *Jama*, *272*(2), 122-124.

Murekefu, T. M., Ouma, O. P. (2012). The Relationship between Dividend Payout and Firm Performance: A Study of Listed Companies in Kenya", European Scientific Journal; Vol. 8, No.9

Muriuki, P. M. (2012). *Relationship between dividend policies and share prices for companies quoted at the Nairobi Stock Exchange (Doctoral dissertation, University of Nairobi, Kenya).*

Musiega, M. G., Alala, O. B., Douglas, M., Christopher, M. O., & Robert, E. (2013). Determinants of dividend payout policy among non-financial firms on Nairobi Securities Exchange, Kenya. *International Journal of Scientific & Technology Research*, *2*(10), 253-266.

Mokaya, S., Nyang'ara, D., &　James, L. (2013). The effect of dividend policy on Market share value in banking industry: The case of National Bank of Kenya. *International Journal of Arts and Commerce, 2(2)(44-49)*

Ndeto, M. S. (2014). *The relationship between dividend payout ratio and the value of the firm for companies listed at the Nairobi Securities Exchange.* (Unpublished Dissertation, University of Nairobi).

Ngobe, D. K., Simiyu, A. K., & Limo, P. K. (2013). Dividend policy and share price volatility in Kenya. *Research journal of finance and accounting, 4*(6), 115-120.

Ngunjiri, M. (2012). The relationship between Dividend payment policies and stock price volatility for companies quoted at NSE. *Journal of economics and finance, 7*(9), 45-66

Odawo, C. (2015). Determinants of dividend payout policy in public ltd banks in Kenya: A case study of CFC Stanbic bank. *Strategic Journal of Business & Change Management*, *2*(2), 22-34

Ouma, O. P. (2012). The relationship between dividend payout and firm performance: a study of listed companies in Kenya. *European scientific journal, 8(9).*

Pandey, I. M. (2012). *Financial management*. New Delhi: Vikas Publication House Pvt Ltd

Partington, G. H. (2015). Dividend Policy and its Relationship to Investment and Financing Policies: Empirical Evidence, *Journal of Business Finance and Accounting*, Vol. 12, No.4, pp. 531- 542.

Pettit, R. (1972). Dividend announcements, Security Performance, and Capital Market Efficiency. *- Journal of Finance, 27 (5), 993-1007.*

Rozeff, S.M. (2012). Growth, beta and agency cost as determinants of dividend payout ratios. *Journal of Financial Research, 5*(1), 11-33

Shamoo, A. E., & Resnik, D. B. (2009). *Responsible conduct of research. Oxford University Press.*

Shisia, A., Marangu, W. N., & Omwario, B. (2014). An Assessment of the Contribution of Credit Reference Bureau Regulation towards Mitigating Credit Risks in the Kenya's Banking Industry. *European Journal of Business and Management*, *6*(14), 229-235.

Selttiz, S., Wrightsman, L., & Cook, S. W. (2012). Research Methods in Social Relations. New York: Holt, Rinehart and Winston

Turki, A,S., & Ahmed,A. (2013). Determination of dividend policy: The evidence from Saudi Arabia. *International Journal of Business and Social Science, 4(1).*

Turnovky, F. (2017). The growth elasticity of poverty reduction: explaining heterogeneity across countries and time periods. *Journal of economics,* 21(8), 121-134

Travlos, N. G., Trigeorgis, L., & Vafeas, N. (2015). Shareholder wealth effects of dividend policy changes in an emerging stock market: The case of Cyprus.

Upagade, V. and Shende, A. (2012). *Research methodology. 2nd edition. S. Chad & Company Ltd. Ram Nagar, New Delhi*

Velnampy.T., Nimalthasan. P., & Kalaiarasi. K. (2014). Dividend Policy and Firm Performance: Evidence from the Manufacturing Companies Listed on the Colombo Stock Exchange. *Global Journal of Management and business research. Administration and Management,* 14(6).

Walter, J.E (1963). Dividend policy: Its influence on the value of the enterprise. *Journal of finance 18, 280-291.*

Wang, X., Manry, D., & Wandler, S. (2011). Stock dividend policy in China. *Journal of Global Business Management*, 7(2), 1.

White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. Econometrica: *Journal of the Econometric Society*, 817-838.

Yegon, C., Cheruiyot, J., & Sang, J. (2014). Effects of dividend policy on firm's performance: Econometric Analysis of listed Manufacturing firms in Kenya. *Research Journal of Finance and Accounting*, 5(12), 136-144.