

# ISSN 2278 - 0211 (Online)

# An Evaluation on the Role of Signalling Effect of Dividends on Future Profits of Companies Listed at the Nairobi Securities Exchange, Kenya

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# Abstract:

Dividend signaling theories give a rationale of reasoning for dividend changes and create hypothesis about the declaration impacts of profits that have been seen in the exact writing. Relationship between current profit payout and future income development is in light of the free income hypothesis. Low profit bringing about low development may be as an after effect of problematic speculation and not as much as perfect activities by directors with overabundance of free money streams available to them. The motivation behind the study was to focus on the evaluation of the role of signaling effect of dividends on future profits of companies listed at the Nairobi Securities Exchange. The study was guided by the following objectives; to determine the effects of dividend payout ratio on company profitability, effects of dividend policy on profitability of companies, effects of company growth opportunities on profitability of companies and effects of firm size on profitability of the companies. The study adopted a stratified simple random sampling design. The target population was 66 companies listed at the NSE. The target population size was made out of 20 of the listed companies randomly chosen from various sectors namely; agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum. Secondary data was collected from the selected companies' past financial reports between 2004 -2014. The data was analyzed using Statistical Packages for Social Sciences (SPSS) version 21.0 to give means, frequencies and percentages. Regression analysis was used to establish the relationship between dividend signaling effects and future profitability of the companies. Correlation analysis signified a weak statistical relationship between dividend payout ratio and profitability of the companies. The regression results indicated that dividend payout ratio does not significantly predict profitability of companies listed at the NSE. Correlation results indicated positive statistical relationship between dividend policy and profitability of the companies. Regression results indicated that dividend policy significantly predict profitability of the companies therefore affecting profitability of the companies listed at the NSE. There was significantly weaker relationship between company growth opportunities (EPS and DPS) and profitability of companies. Regression results indicated that company growth opportunities do not significantly predict profitability of companies. The results indicated significantly positive relationship between firm size and profitability of companies therefore establishing that it can significantly predict profitability of companies. Dividend payout ratio does not significantly affect profitability of the companies. The study recommends a study on individual firms in the same sector to ascertain the results. Company growth opportunities do not significantly affect profitability of the companies. The study recommends the use of other indicators for growth opportunities to asses' effects of growth opportunity on profitability of companies. The findings can help establish an acceptable dividend policy to various stakeholders in public limited companies in Kenya, to assess dividend trends in the Country and to contribute knowledge in the field of finance and related studies.

# 1. Introduction

# 1.1. Background of the Study

The term dividend is characterized as a return arrived from interest in value offers. The benefit made by the firm which is disseminated to the shareholders termed as profit. Every firm after making profit either retain the money for further investment or distribute it among the shareholders. The essential target of monetary administration is the expansion of shareholders' wealth. To attain to this goal, management, the caretakers of shareholders' interest, are faced with three critical classes of choice making in particular, investment, financing and dividend decisions. Speculation choices focus on the aggregate esteem and sorts of advantages a firm utilizes. Financing choices focus on the capital structure of the firm and the structures of the source in which investment choices are made. Profit choices as profit arrangements, which frame the center of this study, include the determination of the dividend policy in which the management follows in deciding the size and pattern of money conveyances to shareholders over time (Lease, *et al.*, 2000).

Dividend signaling gives a basis to profit changes and creates theories about the declaration impacts of profits that have been seen in the exact writing. Pastry specialist, Powell, & Veit, (2002) states that the signaling models for paying profits recommend that directors as insiders select dividend levels to signal to the members of the public. Management has a motivator to signal this private information to the speculating public when they believe that the present business estimation of their company's shares is beneath its inherent level. Dividend signaling future profits have additionally been built through experimental examination, as noted in Cook, *et al* (2002). That most impart value changes occurred instantly taking after the declaration of a profit, particularly positive or negative profit changes.

In the valuation process, (Lease, John, Kalay, Loewenstein, U and Sarig, 2000) state the value of an asset, real or financial, is determined by the size, timing, and risk of expected future cash flows that accrue to the owner of the asset. Also, markets worth offer costs that are in light of expected dividends and the risk attached to ownership of the share (Lease *et al.*, 2000). For the shareholders, this suggests that a share is the selling price of the share plus any dividends payable whilst owning the share. Share price is in this way a key determinant of the estimation of the firm. If dividends are the key indicators of share price and the share price the key indicator of firm value, it stands to reason that to maximize shareholders' wealth; shareholders should be afforded the highest combination of dividends and the increase in the share price. Financial specialists additionally make utilization of comparables during the time spent offer valuation. Investec Private Bank School (2003), notice that the most generally utilized parameters are: earnings per share (EPS), price to earnings ratio (P/E Ratio) and return on equity (ROE). Kaen (2003) states that the reliance on comparables stems from the belief that companies that are in the same industry sector and are of similar size and capacity should have comparable values.

Researchers have established the significant determinants of dividend payout by utilizing board information. Bread, cook and Powell (2000) the exact confirmation results demonstrate that the dividend payout ratio is influenced to a large extend by different indicative variables. Al-Kunari (2010) to pay or not to pay share dividend utilized board information and firm size as a variable affecting corporate dividend payout. John (2013) demonstrated that payout ratio is negatively related to firms' need to top fund finance growth opportunities. Baker and Powell (2000), finished up from their overview of Nairobi Securities Exchange recorded firms that profit determinants are specific and expected level of future income is the real determinant.

As indicated by Arnott and Asness (2003) the positive relationship between current dividend payout and future income is in view of the free income theory. Low dividend bringing about low development may be as a consequence of problematic speculation and not as much as activities by Management with abundance free money streams available to them. This is evident for firms with constrained development opportunities or a propensity towards over-investments. Paying higher dividend may force managers to raise funds from issuance of shares, may subject management to more scrutiny, reduce conflicts of interest and thus curtail suboptimal investment. This is in view of the assumption that sub-optimal investments establish the framework for poor returns in future while reducing conflict of interest will improve development of future profit through well scrutinized investments options. Thus, paying dividends to diminish the free cash flows and reducing the chances of the management investing in non-performing ventures.

Profitability is a type of performance measure which relationship between incomes and costs and on the level of profits with in respect to the size of investment in the business (Zhou & Ruland, 2006). Four commonly used measures of firm profits are: the rate of return on firm's total assets (ROA), the rate of return on firm's equity (ROE), operating profit margin and net firm income. Diverse measures of firm performance have additionally been utilized to test agency cost hypothesis. It is contended that profit efficiency computed using a profit function is a more appropriate measure to test agency cost theory in light of the fact that it controls for the impacts of nearby market costs and different exogenous components.

It additionally gives a sensible benchmark to every individual association's execution if organization expenses were minimized. Profit efficiency is better than expense effectiveness for assessing performance of managers, since it represents how well managers raise incomes and also control costs and is closer to the idea of quality boost. Profit efficiency is measured in two unique ways, that is, standard profit efficiency and alternative profit efficiency.

#### 1.2. Statement of the Problem

Management of companies listed at the Nairobi securities exchange markets are in a dilemma about whether to pay a large, small or zero percentage of their earnings as dividends or to retain them for future investments. This is as a result of the need for management to satisfy the various needs of shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividends now. On the other hand, shareholders who would like to invest in the future will prefer dividends to be retained by the company and be reinvested in order to generate more returns in future (Amidu, 2007). Due to these competing interests of shareholders, the kind of dividend policy adopted by management may have either a positive or negative effect on profitability of the firm as measured by market price per share (MPS). Firms may have low dividend payout because management is optimistic about the firm's future and therefore wishes to retain their earnings for further expansion. Most of the available studies refer to western countries. A problem arises as to whether the findings of those studies can be replicated in emerging economies or infant capital markets like Kenya. In Kenya, a few empirical studies have been done to establish the role of signaling effect of dividends on profitability of companies. Moreover, most studies that have been done in Kenya have focused on particular sector of companies such as banking, agricultural and manufacturing companies. These results could be limited in generalizing the results. The current study therefore seeks to fill this gap by considering companies across all the ten sectors.

#### 1.3. Objectives of the Study

The main objective of the study was to evaluate the role of signaling effect of dividends on future profits of companies listed at the Nairobi Securities Exchange in Kenya.

# 1.3.1. The specific objectives were as follows:

- i. To determine the effects of dividend payout ratio on the future profits of firms listed at the Nairobi Securities Exchange.
- ii. To establish the effects of dividend policy on the future profits of firms listed at the Nairobi Securities Exchange.
- iii. To determine the effects of company growth opportunity on the future profits of firms listed at the Nairobi Securities Exchange.
- iv. To establish the effects of firm size on the future profits of firms listed at the Nairobi Securities Exchange.

#### 1.4. Hypothesis of the Study

The study was guided by the following hypothesis:

- Ho<sub>1</sub>: Dividend payout ratio has no statistically significant effect on the firm future profits
- Ho<sub>2</sub>: Dividend policy has no statistically significant effect on the firm future profits
- Ho<sub>3</sub>: Company's' growth opportunity has no statistically significant effect on the firm future profits
- Ho<sub>4</sub>: Firm size has no statistically significant effect on the firm future profits

#### 1.5. Significance of the Study

The findings of this research report are instrumental and can help establish a dividend policy that can be acceptable to the various stakeholders in public limited companies in Kenya. Companies listed at the Nairobi Securities Exchange also stand to benefit out of the findings in the same manner. A number of other beneficiaries include: The Capital Market Authority who use the findings to assess the dividend trends in the Country. Lastly, the study contributes to the knowledge in the field of finance and related studies.

#### 1.6. Scope and Limitations of the Study

The aim of the study was the evaluation of the role of signaling effects of dividends on future profitability of companies listed at the Nairobi Securities Exchange. The companies selected were those in various sectors; agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum. The fact that the study was not undertaken for all the listed companies may limit the application of the findings; to overcome this challenge study sample was drawn from the various sectors randomly so that the sample is representative of the entire population.

#### 1.7. Assumptions of the Study

The assumptions of the study were that the selected companies could represent the companies across all the entire sectors of companies listed at the Nairobi Securities Exchange. Given that the outcome could be limited in generalizing the results, it is assumed that its findings can be successfully replicated in emerging economies.

#### 1.8. Operational Definition of Terms

- Cash Dividend: the most common way to pay dividend is in the form of cash.
- Dividend: dividend is a payment of a portion of firms' earnings, decided by the board of directors to its shareholders.
- Dividend signaling effects: paying higher dividends to signal the future prospects of a firm to potential investors.
- Dividend policy: Companies' document guiding the management on the size and pattern of cash distributions to shareholders over time.
- Dividend Yield Ratio: Ratio that indicates the return of shareholders on their investments in the form of dividends.
- Earnings Per Share (EPS): Earnings are the profits that remain after the payment of preference dividend and are attributable to shareholders and is expressed as Net Profit after tax per the number of shares in issue.
- Growth opportunity: an investment that has the potential to grow significantly, leading to a profit for the investor.
- Liquidity: the degree to which an asset or security can be bought or sold in the market without affecting the asset's price value.
- Nairobi Securities Exchange (NSE): A private company limited by shares. It is registered under the Societies Act in Kenya.
- Payout ratio: the amount of earnings paid out in dividends to shareholders.
- Price Earnings Ratio (P/E Ratio): This ratio shows how much investors are willing to pay per shilling of reported profits.
- Return on Assets: This ratio measures the profitability of the firm as a whole in relation to total assets employed.
- Return on Equity: This ratio measures the profitability of the firm as a whole in relation to total equity employed.
- Stock Repurchase: it is the process of repurchasing back outstanding share of any company.

# 2. Literature Review

#### 2.1. Theoretical Background Review

According to literature on signaling theory, firms notwithstanding the distortion of investment choices, may pay dividends to signal their future prospects (Amidu, 2007). The instinct in this contention is in view of the information asymmetry between managers (insiders) and outside speculators. Here, managers have private information about the present and future performance of the firm that is not accessible to outsiders.

The proponents of dividend signaling theory contend that dividends are utilized to pass on information about the future prospects of the company cheaply than other methods of conveying information to outsiders (Fuller & Anjani, 2002). Firms can signal their future profit by paying dividends so that an increment in dividend will be seen as a sign to speculators that the organization is performing well. As per Raheja (2005) Dividend can be a perfect gadget for constraining rent extraction of minority shareholders. Major shareholders paying dividend may signal their unwillingness to exploit them. Dividend payouts, nonetheless, ensure equal payout for both insider and outsider equity holders. In light of information asymmetry, dividends are paid as a sign to shareholders that managers are dealing with the firm to their greatest advantage. Managers know better about the performance prospects of a firm; thus, they pay dividends to pass information about the future profits of the firm to potential investors.

Investigations on whether dividend policy, as observed in the payout ratio on market portfolio may forecasts future aggregate earnings growth. The historical evidence strongly suggests that expected future earnings growth is fastest when current payout ratios are high and slowest when payout ratios are low. This relationship is not incorporated by other considerations, such as simple mean reversion in earnings. This differs from the observation of other researchers on the opinion that sufficient reinvestment of money retentions will energize the economic uplift. However subjective information on management signaling their expected financial receivables through dividends or attractive economic ventures may be of great concern. Their findings offer a challenge to market observers who see the low dividend payouts of recent times as a sign of strong future earnings to come (Arnott *et al*; 2003).

Lease, (2000) analyzed whether dividend policy is of any substance. Previous analysis propose that expected future earnings growth is more rapid when current payout ratios are high and slowest when payout ratios are depressed. The findings posed a great challenged to enthusiastic market observers who see recent low dividend payouts as a signal to a better future. These observers may prove to be correct, but history provides scant support for their observation

Furthermore, Amidu (2007) investigated whether dividend policy influences firm performance in Ghana Markets using data derived from the financial statements of listed firms on the GSE (Ghana Stock Exchange) for a span of eight-years. The findings portrayed a significant relationship between growth in sales, return on assets and dividend policy. The study further concealed that large firms executed less on the aspect of return on assets as compared to small firms. The observation revealed a pitfall association between return on assets and dividend payout ratio, and leverage.

The findings of the research study were in agreement past empirical studies but are inconsistent with the signaling effect of dividends on future earnings.

#### 2.2. Theoretical Background of Concepts

There are a number of theories of dividend behaviour, and empirical studies provide little evidence for one over the other. Dividend policy has been one of the areas of corporate finance to be analyzed with a rigorous model, and it has since been one of the most thoroughly researched issues in modern finance. Also, the conceptions concerning corporate dividend theories are different. The main part of the discussion is related to the evaluation of financial research, because at all times researchers have tried to solve the dividend puzzle by using new theories and insights. Key words: Dividends, value of the share, agency theory, information content, signaling, clientele effects, ex-date effects. The dividends may be a signal to the public of the management's anticipations for future policy of the firm and prospects. The dividend is a more believable means of conveying communication because it is expensive to an entity. The costlier the signal the more believable it is (Jensen & Meckling, 1996).

#### 2.2.1. Dividend Relevance Model by Walter

Walter (1993) postulated a theory that dividend policy is relevant in determining the value of a firm. The model holds that when dividends are paid to the shareholders, they are reinvested by the shareholder further hence increasing the value of the firm. This theory is in agreement with dividend signaling aspects on future profits of firms. Walter's model is truly valuable to demonstrate the impacts of dividend policy on all value firms under diverse suppositions about the rate of return.

In spite of Walter and James profits pertinence theory (Walter and James (1993, Miller and Franco (1991) saw dividend payout as irrelevant as indicated by them; the investor is indifferent between dividend declaration and capital gains. The theory is taking into account the presumptions that, a company's speculation approach is altered and that there are no expenses related to it.

#### 2.2.2. The Agency Cost Theory

The assumption of a perfect capital market under the dividend irrelevance theory implies that there are no conflicts of interests between managers and shareholders. Therefore, there ought to be a relationship between dividend payouts and the quality of shareholder rights. Raheja (2005), anticipated on the division of ownership and control, a firm with free cash flow is most likely to invest in venture negative net present value. Shareholders therefore incur (agency) costs associated with monitoring managers' behavior, and these agency costs are an implicit cost resulting from the potential conflict of interest among shareholders and corporate managers. Over investment by managers shall reduce cash flow base of the firms. This shall therefore control organizations from mismanagement and misuse of investor's funds through unjustifiable means.

#### 2.2.3. Clientele Theory

This theory postulates that firms paying dividends attract relatively more investors who prefer those firms that declare high dividends. These firms tend to be more advantageous in quality management. When institutional investors are less taxed than individual investors, dividends induce "ownership clientele" effects. The theory is in line with some renowned uniformity of constant dividends, and can bring out innovative signals.

#### 2.3. Related Literature Review on Objectives

Dayha (2003) examined the relationship between ownership, dividend policy and leverage and concluded that managers make financial policy tradeoffs to control agency costs in an efficient manner, more recently, researchers have attempted to establish the link between firm dividend policy and investment decision. Vasiliou & Eriotis (2003) investigated the association of dividend policy with the debt ratio. The investigation is performed by considering a model that associates the corporate dividend per share at time (t) with a long-run target dividend per share (represented by the dividend variable at time t-i) the earnings per share at time t, and the debt ratio (expressed as the ratio of total debt to total assets) at time t. their regression results suggest that there is a positive association between dividend policy and the examined variables for majority of the firms listed on the Athens Securities Exchange for the period 1996 to 2001.

Pandey (2008) empirically analysed the industrial trends and volatilities of leverage on firms. He found that the level of leverage for all industries was on a positive trend. The study also observed that categorizing leverage percentages by the type of industry does not produce any patterns which may be regarded as regular and positive. The degree of relatedness was not in tandem with the leverage and the type of industry.

# 2.3.1. Effects of Dividend Payout Ratio on Profitability

Payout ratio alludes to the rate of the company's income that is paid out as dividends. In any case, the ratio is in some cases communicated as a rate of income, excluding non-monetary aspects such as depreciation. John (2013) understanding dividend payout ratio is vital, in light of the fact that it can give hints as to the sustainability of an organization's profit and the potential for it to develop. The management of a widely-held firm could dispense assets to ventures that advantage themselves which are not to the greatest advantage of the shareholders. To anticipate problematic uses, shareholders can minimize the money under the management control by requesting considerable dividend from the firm. Myers (2000) proposes that the management deliberately resolve to pay money under the danger of disciplinary action. Reheja (2005), raise the contention that majority shareholders can assume the part of monitoring the management, which improves the estimation of the firm. Allen *et al.*, (2002), underline the firms' inclination for the expansive institutional shareholders that the organizations provide dividend payout levels which fit these shareholders' assessment sections. These models appear to propose that the high dividend payout level and the presence of large institutional shareholders are substitute corporate administration components. Gugler (2003) contend that contentions between the management and shareholders are less serious than those between of large and small shareholders. At the point when the biggest holding expands, the premiums of the vast and little are more adjusted, which makes the small shareholders make less demand on dividends.

Nimalathasan, (2009) explored the relationship between organizational development and profitability of Commercial bank ltd in Sri Lanka over a period of 10 years from 1997 to 2006. He found that, sales are absolutely connected with profitability ratio aside from operating profits, return on equity and number of depositors are negatively related to the profitability ratios except operation profits and return on equity. Similarly, number of advances is additionally negatively related to return on average shareholders' funds.

Gul (1999) studied the relationship between dividend policy and the firms' growth open door in China and Japan utilizing board information system. The study utilized proxies for the development prospects which are; earnings price ratio, the ratio of market value of assets and the firm's assets to book value of equity. The exact results demonstrated a negative relationship between the three variables for development and the profit approach for the Chinese study. The study for Japanese firms demonstrated an irrelevant relationship between the development opportunities and dividend policy. The above studies indicate that there is no clear evidence on the relationship between payout ratio and profitability of the company as indicated by positive relationship in the study by Nimalathasan, (2009), while the study by Gul (1999) indicated negative relationship. This current study is expected to be more predictive given the fact that the companies are selected across ten different sectors.

#### 2.3.2. Effects of Dividend Policy on Profitability

A study by Howatt, (2009) realized that positive changes in profits are connected with positive future changes in mean real earnings per share. Dividend policies continue to bring out disputable argument in both in old and developing markets (Hafeez & Attiya, 2009). This demonstrated that when a firm has an arrangement to pay profits, its benefit is affected. The outcomes additionally demonstrated a statistically significant relationship in the between profit and dividend payout ratio.

In a research conducted by Vasiliou and Eriotis (2003) on the relationship between dividend policy and the debt ratio in view of a theory that relates the firms dividend per share at time (t-1) with a long-run target dividend per share (represented by the dividend variable at time (t-2) the earnings per share at time t, and the debt ratio (expressed as the ratio of total debt to total assets) at time t. their regression results indicated that there is a positive relationship between dividend policy and the analyzed variables for large number of firms listed in the Athens Securities Exchange for the period 1996 to 2001. A research by John (2013) that payout ratio has a negative relationship to the firm's growth opportunities.

Grullon and Michaely (2002) observed that in 1998, U.S firms appropriated more money to shareholders by means of repurchase than cash dividends, and there was a fall in the percentage of firms distributing for the first time (19.35%) over the period 1972-80 to 2.56% over the period 1990-1998). Fama and French (2001) contended that share repurchases is not a major factor in the diminishing in the extent of firms paying dividends. In fact, repurchasing firms are additionally those with cash dividends. The above literature

was done in western Countries, given the differences market environment in western countries and developing countries, these findings may not reflect the market in Kenya.

#### 2.3.3. Effects of Company Growth Opportunity on Profitability

An analysis of previous empirical investigations has documented that researchers have explained the relationship between dividend and growth prospects in different ways. One of the explanations that have been discussed is based on the pecking order theory that companies who has good growth opportunities and large projects prefer to use the internal funding sources to pay for investments. These companies tend not to pay or decrease the dividend just to avoid a situation where they might have to have recourse to costly external financing. Alternatively, to stop managers from entering into unprofitable investments, companies with fewer investment opportunities and slow growth pay higher cash dividends. So, the dividend can play a motivation role, by diminishing the agency costs of free cash flows and removing resources from the firm (Al-Malkawi, 2007). As a result, several studies have found that dividends are lower in companies with high growth opportunities (these companies have lower free cash flows), in comparison to companies with lower growth opportunities (Dempsey & Laber, 1992).

Other researchers have investigated the level of a firm's investment opportunity set to differentiate growth from non-growth firms (Gaver & Gaver, 1993). One agreed result of these studies is that debt in growth companies is lower compared to non-growth companies is lower which minimizes their need for costly external financing. This argument is consistent with Myers (1984), who noted that investment policy can be a substitute for dividend decisions; consequently, the free cash flow reduces the agency problem. In a study, which has tested data from countries with high legal protection, La Porta *et al.* (2000) concluded that fast-growth companies paid lower dividends, as the shareholders were legally protected; they wait to receive their dividends when the investment opportunities are good. However, in countries where shareholders have low levels of legal protection, companies increase the dividend payment; to build a strong reputation for a company, even though it has good investment opportunities. Based on the previous discussion we expect that the two dividend decisions are positively/negatively associated with growth opportunities.

Several proxies have been used in many research studies for growth prospectus such as the market to book ratio of equity, the change in total assets and the market to book ratio of assets (Manos, 2002). This empirical investigation uses the market to book ratio of equity as a proxy for growth opportunities for two reasons: firstly, the logic behind this is simple; if a company's market value is greater than its book value of equity then shareholders expect growth and secondly to facilitate comparability with other empirical papers. The market to book ratio of assets has not been used because of the difficulty of getting the market value of assets.

#### 2.3.4. Effect of Firm Size on Profitability

Small companies with a great deal of information asymmetry should smoothen their dividends more than large firms in order to signal the strong financial situation of the company (Deshmukh, 2003). Thus, the assumption is that dividends help small firms to send information to the market more than large firms in order to move smoothly towards the target dividend payout ratio.

Al-Najjar & Hussainey (2009) found out that small firms in Jordan may experience more transaction costs than large firms since they may have to raise funds to pay their dividends through issuing debt. Therefore, one could conclude that large firms adjust their dividends faster than small firms. The results also show that the size variable for large/small firms is found to be statistically significant and positive at the 1% level; this suggests that the size of the firms has an impact on the smoothness of dividends. In Jordan, large firms can raise funds easier by having greater access to the market (assuming that they are listed) and they are more mature than small size firms and can therefore borrow more easily. In addition, the regulators and the market concentrate more on large firms than small ones because they disclose more information (Al-Najjar & Hussainey, 2009). In addition, this result supports prior research from Deshmukh (2003); although he investigated a sample from a different market (73 companies in the American market during the period 1990-1997), he found that the possibility of large companies smoothing their dividends is higher than small firms. Thus, his findings suggest that large American firms move towards the target dividend payout ratio faster than small ones. In another study using American data, Fama & French (2001) investigated dividends for the period during 1978-199 and concluded that larger and more profitable companies are more likely to smooth their dividends compared to small size companies since large firms can afford to pay more dividends through their profits and in case they need funds then they have easier access to the market.

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#### 2.4. Conceptual Framework

The framework describes the hypothetical interaction between the independent variables and the dependent variable. The study seeks to establish the signaling effects of dividends on future profitability of companies listed at the Nairobi Securities Exchange. The

independent variables in this study where the firm dividend payout ratio, dividend policy, growth opportunity, and firm size while the dependent variable was future profitability of companies listed at the Nairobi Securities Exchange. The interaction of the above variables is illustrated in figure 1.



Figure 1: Conceptual Framework

# 3. Research Methodology

#### 3.1. Research Design

Research design provides a tangible roadmap for a research study. Kothari (2009) defines research design as plan used to generate answers to the targeted research objectives. He continued to argue that a research design is a strategy to attain solutions to research and to control variants. The study adopted stratified simple random sampling design. The design was considered appropriate for the study because according to Kothari (2009) the method is suitable when the researcher wants to proportionately highlight specific subgroups within a population then finally selects the final subjects from the different strata. The technique ensures the presence of key subgroups within the sample and to obtain data useful in evaluating present practices and providing basis for decisions. The design was appropriate for describing the signaling effects of dividends on future profitability of companies listed at the Nairobi Securities Exchange.

#### 3.2. Description of Research Area

The study was conducted in companies listed at the Nairobi Securities Exchange; The Nairobi Securities Exchange has classified these companies into ten sectors these are: agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum (Nairobi Securities Exchange, 2014).

#### 3.3. Target Population

According to Ogula (2005), population is any group of people, institutions, objects that have at least one characteristic in common. Furthermore, Mugenda and Mugenda (2003) defines target population as a process to which a researcher wants to generate the results of the study. The population for this study was companies listed at the Nairobi Securities Exchange as at 2014. There are 66 companies listed at the Nairobi Securities Exchange as indicated in appendix II.

#### 3.4. Sample and the Sampling Technique

Ogula (2005) defines sample as a sub-group of a population or universe; while sampling is the process they are selected. According to Frankel and Klallan (2000) a sample is a group from which information is obtained. They define sampling as a process of selecting a number of individual from a population. Reddy (2007) argues out that a sample should be picked in such a way that it represents the entire population to be investigated. An optimal sample is one which fulfils the requirements of efficiency, representatives, reliability and flexibility. The researcher used a combination of cluster and simple random sampling. Simple random sampling gives each member of the population equal chance of being selected, hence eliminate selection biasness (Mugenda, 2003). All the companies listed at the NSE were clustered into the following categories; agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, -energy and petroleum. Two companies were selected randomly from each category. This gave a sample size of 20 companies which represents 30.30 % of the target population, which is more than the minimum recommended sample size. Gay (2003) recommends that when the target population is small (less than 1000 members) a minimum sample of 20% is adequate for educational research.

# 3.5. Data Collection

Data collection involves a lot of procedures, guidelines and ethics. The main methods of data collection in this research consisted of obtaining past financial reports from the selected companies' websites for the period 2004-2014. The method encompasses the collection of company data from their authenticated records and other acceptable documents.

#### 3.5.1. Types of Data

The study utilized secondary data from the selected companies obtained from the companies' websites for a period of 10 years.

#### 3.5.2. Secondary Data

According to White (2010), secondary data in an extension program can add richness and depth to the logic model that acts as a roadmap for the Extension program. Secondary data can improve the clarity of the problem and the situation surrounding the issues, and they can also provide additional information to reinforce primary data used to show the outcome and impact of Extension programs. The consolidated statement of comprehensive income and statement of financial position extracted from firm's statements approved by the board of directors were used as available in the companies and their websites.

# 3.5.2.1. Validity of Research Instruments

According to Mugenda (2003) validity is realistic implication based on the research results. The researcher established the validity of research instruments by presenting them to supervisors from Kisii University. Their advice was used to adjust the instruments.

# 3.5.2.2. Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability is influenced by random error. As random error increases, reliability decreases. Random error is the deviation from the true measurement due to factors that have not been addressed effectively by the researcher such as coding, ambiguous instructions to respondents and bias (Mugenda and Mugenda, 2003). To ensure reliability of the instruments, a pilot study was conducted in two companies listed at the Nairobi Securities Exchange that are not part of the study. The secondary data collected was analyzed and the output discussed with three experts in the related field to establish its relevance in answering the objectives of the study.

# 3.5.2.3. Data Instrument Permit

The researcher applied for research permit from National Commission for Science, Technology and Innovation and Kisii University which was effectively permitted. A copy of this is attached in appendix XII of this research report.

#### 3.6. Data Analysis

Data analysis is the process of systematically applying statistical and logical techniques to describe and illustrate, condense, recap, and evaluate data. According to Smeenton and Goda (2003) various analytical procedures provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the statistical fluctuations present in the data. An essential component of ensuring data integrity is the accuracy and appropriate analysis of research findings. Statistical Package for Social Sciences (SPSS) -the appropriate version was used to generate data. Regression model was used to predict the effects of payout ratio, dividend policy, company growth opportunities and firm size on profitability of the companies. The regression model adopted is indicated below;

# $\mathbf{Y} = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 \mathbf{X}_1 + \boldsymbol{\beta}_2 \mathbf{X}_2 + \boldsymbol{\beta}_3 \mathbf{X}_3 + \boldsymbol{\beta}_4 \mathbf{X}_4 + \boldsymbol{\varepsilon}$

#### Whereby;

Y = Profitability of companies;  $\alpha$  = Constant Term;  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ = Beta Coefficients x 1 = Payout ratio; x 2 = Dividend policy; x 3 = Company growth opportunities x 4 = Firm size;  $\hat{\epsilon}$  = Error Term

This regression model is represented in Table 1.

|            | Y             | X1           | X2                   | X3                           | X4                    |  |
|------------|---------------|--------------|----------------------|------------------------------|-----------------------|--|
| Variables  | Profitability | Payout ratio | Dividend policy      | Company growth opportunities | Firm size             |  |
| Indicators |               |              |                      |                              |                       |  |
| 1          |               | EPS          | Retained Earnings    | EPS                          | Turn over             |  |
| 2          |               | DPS          | Debt capital         | DPS                          | Total Assets          |  |
| 3          |               | MPS          | Value of investments | Book value per share         | Market capitalization |  |

Table 1: Model for multiple regression

# 3.6.1. Ethical Consideration

Ethics are moral principles and rules of conduct dealing with what is right and what is wrong (De Vos *et al*, 2005). There were a number of ethical issues that was adhered to in this study. They include; obtaining permission to undertake the research from National Commission for Science, Technology and innovation, and the undertaking to treat all information received confidentially by protecting the identity of participants.

#### 4. Research Findings

#### 4.1. Effects of Dividend Payout Ratio on the Future Profits of Firms

The first objective of the study was to establish the effects of dividend payout ratio on the future profits of firms listed at the Nairobi securities exchange. Figure 2 present the average of payout ratio of the selected companies. The results indicate that all companies paid out dividends for the period considered. The payout ratio for the selected companies ranged between 12.38 and 56.41. The companies paying higher dividend from their profits were banking industry (40.63%),

Construction companies (51.90%) and manufacturing companies (56.41%). The companies paying lower dividend from their profits were insurance companies (12.38%), investment (13.27%) and energy and petroleum (13.66%).

The information is represented in Figure 2



Figure 2: Average payout ratio of selected companies listed at the NSE

#### 4.1.1. Correlation Analysis of Dividend Payout ratio and Firm's Profitability

The correlation analysis results indicate that there is weak statistical relationship between dividend payout ratio and net profits of the companies (This indicates that firms consider other factors in arriving at the payout ratio.

|                       |                     | Dividend payout ratio | Net profit |
|-----------------------|---------------------|-----------------------|------------|
| Dividend payout ratio | Pearson Correlation | 1                     | .149       |
|                       | Sig. (2-tailed)     |                       | .682       |
|                       | Ν                   | 10                    | 10         |
| Net profit            | Pearson Correlation | .149                  | 1          |
|                       | Sig. (2-tailed)     | .682                  |            |
|                       | Ν                   | 10                    | 10         |

Table 2: Correlations of dividend payout ratio on profitability of companies

# 4.2. Effects of Dividend Policy on the Future Profits of Firms

The second objective of the study was to determine the effects of dividend policy on future profits of firms listed at the NSE. The variables considered for dividend policy were; retained earnings and debt capital.

#### 4.2.1. Retained Earnings

Figure 3 present average retained earnings of the selected companies listed at the NSE. The results indicate that telecommunication companies retained the highest amount, Ksh.42.1 billion, banks retained Ksh.16.06 billion commercials Ksh.9.38 billion construction companies Ksh.8.16 billion while energy and petroleum retained Ksh.7.26 billion. Among the companies that retained the least amounts were; manufacturing, Ksh.0.95 billion, automobiles, Ksh.0.93 billion and investments at Ksh.0.73 billion.



Figure 3: Average retained earnings for selected companies listed at the NSE

# 4.2.2. Debt Capital

The debt capital was also considered under the dividend policy of the selected companies. The average of the debt capital of the companies indicated that the banking sector had the highest debt capital amounting to Ksh.9.06 billion, energy and petroleum had Ksh.6.4 billion while the telecommunication companies had a debt capital of Ksh.4.39 billion, commercials had Ksh. 0.019 billion and agricultural companies had Ksh.0.037 billion. The information is presented in Figure 4



Figure 4: Average Debt capital for selected companies listed at the NSE

# 4.2.3. Correlation of Dividend Policy on Profitability of Firms

The factors considered for dividend policy were retained earnings and debt capital. The results indicated a strong positive correlation  $(r = .963^{**}, p = 0.01)$  between retained earnings and net profits. There was also a strong positive correlation  $(r = .663^{*}, p = 0.05)$  between debt capital and net profit. Correlation analysis indicated that there is a statistical significant relationship between dividend policy and profitability of the companies listed at the NSE. The correlation results are presented in Table 3.

|                   |                     | Net<br>profit | Retained earnings | Debt capital |
|-------------------|---------------------|---------------|-------------------|--------------|
| Net profit        | Pearson Correlation | 1             | .963**            | .663*        |
|                   | Sig. (2-tailed)     |               | .000              | .037         |
|                   | Ν                   | 10            | 10                | 10           |
| Retained earnings | Pearson Correlation | .963**        | 1                 | .512         |
|                   | Sig. (2-tailed)     | .000          |                   | .131         |
|                   | Ν                   | 10            | 10                | 10           |
| Debt capital      | Pearson Correlation | .663*         | .512              | 1            |
|                   | Sig. (2-tailed)     | .037          | .131              |              |
|                   | Ν                   | 10            | 10                | 10           |

Table 3: Correlations between dividend policy and companies' profitability

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

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

# 4.3. Effects of Company Growth Opportunity on the Future Profits of Firms

The third objective of the study was to establish the effects of company growth opportunities on future profitability of the firms listed at the NSE. The factors considered for company growth opportunities were; Earnings Per Share (EPS) and Dividend Per Share (DPS).

#### 4.3.1. Earnings per Share (EPS)

Figure 5 presents the average EPS of selected companies listed at the NSE. The results show that the insurance companies had the highest EPS, at Ksh.18.549; manufacturing companies posted an average of Ksh. 9.377 while commercials listed Ksh. 8.9865. The companies paying lower EPS were investment with average of Ksh. 0.11, and telecommunications at Ksh.0.5.



Figure 5: Average EPS for selected companies listed at the NSE

# 4.4.2. Dividend per share (DPS)

Dividend per share was also considered as the indicator for company growth opportunities. The results indicated that insurance companies pay on average the highest DPS of Ksh.5.865, followed by commercials with Ksh.3.1375. The companies in the category of paying lower DPS were telecommunications Ksh. 0.175, investments, Ksh.0.284 and automobiles at Ksh.0.405. The information is presented in Figure 6.



Figure 6: Average DPS for selected companies listed at the NSE

# 4.4.3. Correlation between Company's Growth Opportunities and Profitability

Correlation results indicate that there is a significantly negative relationship between company's growth opportunities and profitability. There was also a significantly negative correlation between EPS and net profit as well as DPS and net profit. Correlation results indicate that there is significantly negative relationship between company growth opportunities and profitability. The results are presented in Table 4.

|        |                     | Net profit | EPS  | DPS  |
|--------|---------------------|------------|------|------|
| Net    | Pearson Correlation | 1          | 401  | 319  |
| profit | Sig. (2-tailed)     |            | .251 | .369 |
|        | Ν                   | 10         | 10   | 10   |
| EPS    | Pearson Correlation | 401        | 1    | .521 |
|        | Sig. (2-tailed)     | .251       |      | .122 |
|        | Ν                   | 10         | 10   | 10   |
| DPS    | Pearson Correlation | 319        | .521 | 1    |
|        | Sig. (2-tailed)     | .369       | .122 |      |
|        | Ν                   | 10         | 10   | 10   |
|        |                     |            |      |      |

Table 4: Correlations between company growth opportunities and profitability

# 4.4. Effects of Firm Size on the Future Profits of Firms

The fourth objective of the study was to determine the effects firm size on profitability of firms listed at the NSE. The factors considered for firm size were; total assets and company capitalization.

# 4.4.1. Total Assets

The banking industry and telecommunications companies had the highest average total asset, of Ksh.198.89 billion and Ksh.86.96 billion respectively, while manufacturing had Ksh.1.62 billion and agriculture had Ksh.3.94 billion. The average total assets for the selected companies are presented in Figure 7.



Figure 7: Average total assets for the selected companies

# 4.4.2. Company Capitalization

The study also considered company capitalization as an indicator for company size. Telecommunication had the highest amounts as company capitalization amounting to Ksh. 60.69 billion, energy and petroleum, Ksh.38.58 billion and banking had Ksh. 32.07 billion. The companies with the low capitalization were manufacturing companies with Ksh.1.43 billion and automobiles had Ksh.1.91 billion, as indicated in Figure 8.



Figure 8: Average company capitalization for the selected companies

# 4.4.3. Correlation between Firm Size and Future Profitability of the Companies

The factors considered as indicators for firm size were turn over, total asset and company capitalization. There was a weak relationship between turn over and profitability of the companies. There was a strong positive correlation ( $r = .726^*$ , p = 0.05) between total assets and profitability of the company. There was a strong positive correlation ( $r = .888^{**}$ , p = 0.01) between company capitalization and net profit of companies. The results indicated that there is a statistical significant relationship between company size and future profitability of companies. Correlation results are presented in Table 5.

|                        |                     | Net profit  | Turno-ver  | Total asset | Company capitalization |
|------------------------|---------------------|-------------|------------|-------------|------------------------|
| Net profit             | Pearson Correlation | 1           | .491       | .726*       | .888***                |
|                        | Sig. (2-tailed)     |             | .149       | .017        | .001                   |
|                        | Ν                   | 10          | 10         | 10          | 10                     |
| Turnover               | Pearson Correlation | .491        | 1          | .274        | .730*                  |
|                        | Sig. (2-tailed)     | .149        |            | .443        | .016                   |
|                        | Ν                   | 10          | 10         | 10          | 10                     |
| Total asset            | Pearson Correlation | .726*       | .274       | 1           | $.652^{*}$             |
|                        | Sig. (2-tailed)     | .017        | .443       |             | .041                   |
|                        | Ν                   | 10          | 10         | 10          | 10                     |
| Company capitalization | Pearson Correlation | $.888^{**}$ | $.730^{*}$ | .652*       | 1                      |
|                        | Sig. (2-tailed)     | .001        | .016       | .041        |                        |
|                        | Ν                   | 10          | 10         | 10          | 10                     |

Table 5: Correlations between company size and profitability of companies

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

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

# 4.5. Firms' Profitability

Net profit was used as an indicator for companies' profitability. The telecommunication companies posted the highest net profit of Ksh. 12.63 billion and banking industry that posted Ksh. 7.92 billion. The companies that posted significantly lower net profits were investment companies that posted Kshs. 631.7 million and manufacturing companies at Ksh. 243.5 million. The information is illustrated in Figure 9.



Figure 9: Avarage net profits of selected companies

# 4.6. Regression Analysis

# 4.6.1. Model Summary

Multiple regression was used to establish the extent in which the independend variables ( pay out ratio, dividend policy, company growth opportunities, and firm size) predict the dependend variable. The R square indicate the level in which the variables considered predict the changes in the dependent variable. The R square was 0.673, which shows that the variables considered predict 67.3 % of the profitability of the company.

| Model | R                      | <b>R</b> Square | <b>Adjusted R Square</b> | Std. Error of the Estimate |  |  |  |  |  |  |  |
|-------|------------------------|-----------------|--------------------------|----------------------------|--|--|--|--|--|--|--|
| 1     | .820 <sup>a</sup>      | .673            | .655                     | .32886                     |  |  |  |  |  |  |  |
|       | Table 6: Model Summary |                 |                          |                            |  |  |  |  |  |  |  |

a. Predictors: (Constant), Turnover, EPS, DPS, Dividend payout ratio, Retained earnings, Debt capital, total assets, Company capitalization.

#### 4.6.2. Analysis of Variance

The statistical analysis of the model based on the analysis of variance gave (F = 19.711, p = 0.003) indicating that the variables considered significantly predict the dependent variable at the statistically chosen 5% level of significance. The results therefore show that, payout ratio, dividend policy, firm growth opportunities, and firm size statistically affects profitability of the companies. This signifies collinearity. The results are shown in Table 7.

|   | Model      | Sum of | Squares  | df  | Mean Square     | F      | Sig.              |
|---|------------|--------|----------|-----|-----------------|--------|-------------------|
| 1 | Regression |        | 1.471E14 | 4   | 3.676E13        | 19.711 | .003 <sup>a</sup> |
|   | Residual   |        | 9.326E12 | 5   | 1.865E12        |        |                   |
|   | Total      |        | 1.564E14 | 9   |                 |        |                   |
|   |            |        | Table 7. | ANC | WA <sup>b</sup> |        |                   |

Table 7: ANOVA<sup>b</sup>

a. Predictors: (Constant), Turnover, EPS, DPS, Dividend payout ratio, Retained earnings, Debt capital, total assets, Company capitalization.

b. Dependent Variable: Net profit

#### 4.6.3. Coefficients

The statistical coefficients indicated the prediction of each variable considered to the variability in the depended variable. The coefficient results indicated that dividend payout ratio was less significant at ( $\beta = 20075.954$ , p = 0.504). Dividend policy was

significant at ( $\beta$  = .337, p= 0.001). Firm growth had weak significant at ( $\beta$  = 860.499, p = 0.993). Firm size was significant at ( $\beta$  = 0.176, p = 0.015).

The t-test results indicate that dividend policy (t = 6.506) was statistically stronger predictor of profitability, followed by firm size at (t = 3.649).

|   | Model                 | Unstandardiz | ed Coefficients | <b>Standardized Coefficients</b> | t     | Sig. |
|---|-----------------------|--------------|-----------------|----------------------------------|-------|------|
|   |                       | Beta         | Std. Error      | Beta                             |       |      |
| 1 | (Constant)            | -345489.071  | 1229785.287     |                                  | 281   | .790 |
|   | Dividend payout ratio | 20075.954    | 27919.511       | .080                             | .719  | .504 |
|   | Dividend policy       | .337         | .052            | 1.023                            | 6.506 | .001 |
|   | Firm growth           | 860.499      | 92509.458       | .001                             | .009  | .993 |
|   | Firm size             | .176         | .048            | .863                             | 3.649 | .015 |

Table 8: Coefficients<sup>a</sup>

a. Dependent Variable: Net profit

Regression results indicate that, there are only two variables considered that fit into the model, these are dividend policy and firm size. Therefore, replacing the significant values into the model presented shall be as;

 $\mathbf{Y} = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 \mathbf{X}_1 + \boldsymbol{\beta}_2 \mathbf{X}_2 + \boldsymbol{\varepsilon}$ 

 $Y = -345489.071 + 0.337X_1 + 0.176 X_2 + 1229785.287$ 

#### • Hypothesis

The null hypothesis of the study was that there is no statistical significant effect of dividend payout ratio on the firm future profits. The results indicated that dividend payout ratio was ( $\beta = 20075.954$ , p = 0.504), since p = 0.504, was > 0.05, it indicates that payout ratio is not significant; it therefore failed to reject the null hypothesis.

The second null hypothesis (Ho<sub>2</sub>) was that there is no statistical significant effect of dividend policy on the firm future profits. Regression results was ( $\beta = .337$ , p= 0.001), since P < 0.05, it therefore rejected the null hypothesis.

The third null hypothesis (Ho<sub>3</sub>) was; there is no statistical significant effect of company's' growth opportunity on the firm future profits. The p- value (p = .993) was > 0.05. Indicating that the growth opportunity is not statistically significant, hence it failed to reject the null hypothesis.

The fourth hypothesis ( $H_4$ ) of the study was that there is no statistical significant effect of firm size on the firm future profits. The results indicated that firm size (p=.015) significantly affects profitability of the companies. It therefore rejected the null hypothesis.

#### 5. Summary of the Findings, Conclusions and Recommendations

#### 5.1. Summary of the Findings

#### 5.1.1. Effects of Dividend Payout Ratio on the Future Profits of Firms

The results indicate that all companies paid out dividends for the period considered. The payout ratio for the selected companies ranged between 12.38 and 56.41. The companies paying higher dividends from their profits were banking industry, construction companies, and manufacturing companies. The companies paying lower dividend from their profits were insurance companies, investment and energy and petroleum. The correlation analysis results indicate that there is no statistical significant relationship between dividend payout ratio and net profits of the companies. The results are contrary to (Lee, 2009) who examined the relationship between profitability and dividend payout in Korean banks during 1994 –2005 using panel data. He found that the banks with higher profitability or performance pay more dividends and are very strong and consistent.

#### 5.1.2. Effects of Dividend Policy on the Future Profits of Firms

The results indicate that telecommunication companies, banks, commercials, and construction retained higher amount. Among the companies that retained the least amounts were; manufacturing, automobiles, and investments. The debt capital was also considered under the dividend policy of the selected companies. The average debt capital of the companies indicated that the banking sector, energy and petroleum had significantly higher debt capital while the telecommunication companies and manufacturing companies had significantly lower debt capital. Correlation results indicated a strong positive correlation ( $r = .963^{**}$ , p = 0.01) between retained earnings net profits. There was also a fairly strong positive correlation ( $r = .663^{*}$ , p = 0.05) between debt capital and net profit. Correlation analysis indicated that there is a statistical significant relationship between dividend policy and profitability of the companies listed at the NSE. These findings are in agreement with (Elsiddig, 2014) who establish a relationship between dividend policies on profitability of United Emirates Banking sector.

#### 5.1.3. Effects of Company Growth Opportunity on the Future Profits of Firms

The results show that the insurance companies, manufacturing companies and commercials had the highest EPS. The companies paying significantly lower EPS were investment, and telecommunications. Dividend per share was also considered as a significant indicator for company growth opportunities. Statistical results indicated that insurance companies and commercials paid on average

the higher DPS. Companies in the category of paying lower DPS were telecommunications, investments and automobiles. Correlation results indicate that there is less significant relationship between company's growth opportunities and profitability. There was insignificant correlation between EPS and net profits. The results are in agreement with Adila, Oladipo and Adeoli (2012), they established no significant effect of EPS on profitability on Quoted companies in Nigeria.

#### 5.1.4 .Effects of Firm Size on the Future Profits of Firms

The factors considered for firm size were; total assets and company capitalization. The banking industry and telecommunications companies had the highest average total asset while manufacturing and agriculture had lower total assets. The study also considered company capitalization as an indicator for company size. Telecommunication, energy & petroleum and banking had the higher amounts on company capitalization. The companies with low capitalization were manufacturing companies and automobiles.

There was insignificant relationship between turn over and profitability of the companies. There was a strong positive correlation ( $r = .726^*$ , p = 0.05) between total assets and profitability of the companies. There was also a very strong positive correlation ( $r = .888^{**}$ , p = 0.01) between company capitalization and net profit of companies. The statistical results indicated that there is a significant relationship between company size and future profitability of companies. The results concur with (Wekesa, 2012) who established that firm size positively affects profitability of companies listed at the NSE.

The R square was 0.673, which shows that the variables considered statistically predict 67.3% of the profitability of the company. Analysis of variance gave (F = 19.711, p = 0.003) indicating that the variables considered significantly predict the dependent variable at 5% chosen level of significance. The statistical results therefore show that combined, payout ratio, dividend policy, firm growth opportunities, and firm size affects profitability of the companies. The coefficient results indicated that dividend payout ratio was less significant ( $\beta$  = 20075.954, p = 0.504). Dividend policy was strongly significant ( $\beta$  = .337, p= 0.001). Firm growth was less significant ( $\beta$  = 860.499, p = 0.993).

#### 5.2. Conclusion

Correlation analysis indicated no significant relationship between dividend payout ratio and profitability of the companies. The regression results indicated that dividend payout ratio does not significantly predict profitability of companies. The study concludes that, dividend payout ratio does not significantly affect profitability of the companies listed at the NSE.

Correlation results indicated a positive relationship between dividend policy and profitability of the companies. Regression results indicated that dividend policy significantly predict profitability of the companies. Therefore, dividend policy significantly affects profitability of the companies listed at the NSE.

There was less significant statistical relationship between company growth opportunities (EPS and DPS) and profitability of companies. Regression results indicated that company growth opportunities do not significantly predict profitability of companies.

The results indicated a significant relationship between firm size and profitability of companies. The study established that firm size significantly predicts profitability of companies.

#### 5.3. Recommendations

- 1. Dividend payout ratio does not significantly affect profitability of the companies. The study recommends a study on individual firms in the same sector to ascertain the results.
- 2. Company growth opportunities do not significantly affect profitability of companies. The study recommends the use of other indicators for growth opportunities to assess the effects of company growth opportunities on profitability.

#### 5.4. Areas for Further Studies

- 1. Future studies to consider the effect of liquidity and leverage on profitability of companies listed at the NSE.
- 2. Future studies to consider the effects company sector on profitability of companies listed at the NSE.

#### 6. Acknowledgement

This work would not have been completed with my effort alone. My sincere thanks and appreciation goes to my supervisors; Dr. Caroline Ayuma, Mr. Edwin Terer for their expert guidance, encouragement and enormous contribution during development of this research project. I also appreciate the contribution of friends and colleagues who participated in the writing of this research project.

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# **APPENDIX I: SECONDARY DATA COLLECTION GUIDE**

# **Dividend Payout Ratio**

| Variable<br>2004-2014        | 4/5 | 5/6 | 6/7 | 7/8 | 8/9 | 9/10 | 10/11 | 11/12 | 12/13 | 13/14 |
|------------------------------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| Earnings per share           |     |     |     |     |     |      |       |       |       |       |
| Dividends per share          |     |     |     |     |     |      |       |       |       |       |
| Market price per share (MPS) |     |     |     |     |     |      |       |       |       |       |

# **Dividend Policy**

| Variable             | 4/5 | 5/6 | 6/7 | 7/8 | 8/9 | 9/10 | 10/11 | 11/12 | 12/13 | 13/14 |
|----------------------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| 2004-2014            |     |     |     |     |     |      |       |       |       |       |
| Retained Earnings    |     |     |     |     |     |      |       |       |       |       |
| Debt capital         |     |     |     |     |     |      |       |       |       |       |
| Value of investments |     |     |     |     |     |      |       |       |       |       |

# **Company Growth Opportunities**

| Variable<br>2004-2014      | 4/5 | 5/6 | 6/7 | 7/8 | 8/9 | 9/10 | 10/11 | 11/12 | 12/13 | 13/14 |
|----------------------------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| Earnings per share         |     |     |     |     |     |      |       |       |       |       |
| Dividends per share        |     |     |     |     |     |      |       |       |       |       |
| Book value per share(BVPS) |     |     |     |     |     |      |       |       |       |       |

# **Firm Size**

| Variable              | 4/5 | 5/6 | 6/7 | 7/8 | 8/9 | 9/10 | 10/11 | 11/12 | 12/13 | 13/14 |
|-----------------------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| 2004-2014             |     |     |     |     |     |      |       |       |       |       |
| Turn over             |     |     |     |     |     |      |       |       |       |       |
| Total assets          |     |     |     |     |     |      |       |       |       |       |
| Market capitalization |     |     |     |     |     |      |       |       |       |       |

# Profitability

| Variable                   | 4/5 | 5/6 | 6/7 | 7/8 | 8/9 | 9/10 | 10/11 | 11/12 | 12/13 | 13/14 |
|----------------------------|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| 2004-2014                  |     |     |     |     |     |      |       |       |       |       |
| Net profits                |     |     |     |     |     |      |       |       |       |       |
| Return on capital employed |     |     |     |     |     |      |       |       |       |       |
| Return on                  |     |     |     |     |     |      |       |       |       |       |
| shareholders'              |     |     |     |     |     |      |       |       |       |       |
| Fund                       |     |     |     |     |     |      |       |       |       |       |
| Return on                  |     |     |     |     |     |      |       |       |       |       |
| Total Assets               |     |     |     |     |     |      |       |       |       |       |

# APPENDIX II: NSE LISTED COMPANIES

| Agricultural Sector                                      | Commercial and Services                       |
|--|---|
| 1.Williamson Tea Kenya Limited                           | 35.Express Kenya Limited                      |
| 2. Sasini Tea And Coffee Limited                         | 36.Kenya Airways Limited                      |
| 3.Rea Vipingo Plantations Limited                        | 37.Longhorn Kenya Limited                     |
| 4. Limuru Tea Company Limited                            | 38.Nation Media Group Limited                 |
| 5. Kapchorua Tea Company Limited                         | 39.Scangroup Limited                          |
| 6. Kakuzi Limited  | 40.Standard Group Limited                     |
| 7. Eaagads Limited                                       | 41.TPS Eastern Africa Limited (Serena Hotels) |
| Automobiles and Accessories                              | 42.Atlas Development & Support Services       |
| 8. Car And General (Kenya) Limited                       | 43.Hutchings Biemer Limited                   |
| 9. CMC Holdings Limited                                  | 44.Uchumi Supermarket Limited                 |
| 10. Marshalls (EA) Limited                               | Construction and Allied Sector                |
| 11.Sameer Africa Limited                                 | 45.ARM Cement Limited                         |
| Banking  | 46.Bamburi Cement Company Limited             |
| 12.Barclays Bank Of Kenya Limited                        | 47.Crown Paints Kenya Limited                 |
| 13.CFC Stanbic Bank                                      | 48.East African Cables Limited                |
| 14. Co-operative Bank Of Kenya                           | 49.East African Portland Cement Company       |
| 15.Diamond Trust Bank (Kenya) Limited                    | Investment                                    |
| 16.Equity Bank Limited                                   | 50.Centum Investment Company (ICDCI) Limited  |
| 17.I & M holdings limited                                | 51.Olympia Capital Holdings Limited           |
| 18. Housing Finance Company Limited                      | 52.Transcentury Limited                       |
| 19.Kenya Commercial Bank Limited                         | 53.Kurwitu ventures limited                   |
| 20.National Bank Of Kenya Limited                        | 54.Flame tree group holdings ltd              |
| 21.NIC Bank Limited                                      | 55.Nairobi securities exchange                |
| 22.Standard Chartered Bank Kenya Limited                 | 56.Home Africa limited                        |
| Energy and Petroleum                                     | 57.A.Baumann & co. limited                    |
| 23.Kenol Kobil Limited                                   | Manufacturing and Allied                      |
| 24. Kenya Electricity Generating 25. Company (KENGEN)Co. | 58.Boc Kenya Limited                          |
| 26.The Kenya Power & Lighting Limited                    | 59.British American Tobacco Kenya Limited     |
| 27.Total Kenya Limited                                   | 60.Carbacid Investments Limited               |
| 28.Umeme Limited   | 61.East African Breweries Limited             |
| Insurance  | 62.Eveready East Africa Limited               |
| 29.Britam Limited  | 63.Mumias Sugar Company Limited               |
| 30.CIC Insurance Limited                                 | 64.Unga Group Limited                         |
| 31.Jubilee Holdings Limited                              | Telecommunication and Technology              |
| 32.Kenya Reinsurance Corporation Limited                 | 65.Accesskenya Group                          |
| 33.Liberty Kenya Holdings Limited                        | 66.Safaricom limited                          |
| 34.Pan Africa Insurance Company Limited                  |   |

Source: www.nse.co.ke -Nairobi Securities Exchange (NSE, 2014)

# APPENDIX III: DIVIDEND PAY OUT RATIO

|                   | 14/13 | 13/12 | 12/11 | 11/10 | 10/09 | 09/08  | 08/07 | 07/06 | 06/05 | 05/06 |
|-------------------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| AGRICULTURAL      | 21.52 | 40.89 | 12.24 | 28.54 | 32.94 | 17.32  | 6.66  | 13.89 | 17.39 | 12.88 |
| AUTOMOBILES AND   | 6.09  | 14.95 | 22.06 | 32.10 | 3.74  | 47.67  | 3.53  | 4.35  | 5.50  | 3.85  |
| ACCESSORIES       |       |       |       |       |       |        |       |       |       |       |
| BANKING           | 37.20 | 41.64 | 42.29 | 42.79 | 43.37 | 44.72  | 39.43 | 38.02 | 36.61 | 40.24 |
| COMMERCIAL AND    | 37.31 | 38.17 | 34.94 | 31.50 | 52.18 | 33.63  | 41.01 | 9.86  | 0     | 0     |
| SERVICES          |       |       |       |       |       |        |       |       |       |       |
| CONSTRUCTION AND  | 71.19 | 68.54 | 44.88 | 36.32 | 41.17 | 41.52  | 46.47 | 44.94 | 56.31 | 67.68 |
| ALLIED            |       |       |       |       |       |        |       |       |       |       |
| ENERGY AND        | 10.53 | 6.58  | 4.37  | 17.51 | 19.30 | 19.19  | 34.94 | 6.91  | 8.59  | 8.67  |
| PETROLEUM         |       |       |       |       |       |        |       |       |       |       |
| INSURANCE         | 8.85  | 17.83 | 20.32 | 19.99 | 13.54 | 27.94  | 0     | 0     | 15.34 | 0     |
| INVESTMENT        | 8.92  | 58.45 | 20.47 | 29.78 | 7.75  | 7.35   | 0     | 0     | 0     | 0     |
| MANUFACTURING AND | 31.18 | 43.96 | 51.15 | 63.14 | 27.62 | 109.46 | 33.14 | 71.17 | 82.38 | 50.87 |
| ALLIED            |       |       |       |       |       |        |       |       |       |       |
| TELECOMMUNICATION | 41.23 | 35.23 | 34.38 | 30.30 | 26.32 | 18.52  | 14.29 | 33.33 | 16.13 | 0     |
| AND TECHNOLOGY    |       |       |       |       |       |        |       |       |       |       |

# APPENDIX IV: RETAINED EARNINGS (Ksh.Billions)

|                                      | 14/13      | 13/12      | 12/11      | 11/10      | 10/09      | 09/08      | 08/07      | 07/06      | 06/05      | 05/04     |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------|
| AGRICULTURAL                         | 2,134,931  | 1,962,238  | 1,755,525  | 1,524,825  | 1,160,796  | 949,230    | 798,060    | 680,272    | 613,696    | 352,335   |
| AUTOMOBILES<br>AND ACCESSORIES       | 626,354    | 1,636,774  | 1,340,732  | 1,407,605  | 1,047,042  | 905,053    | 803,967    | 628,868    | 488,328    | 431,919   |
| BANKING                              | 41,509,270 | 34,630,384 | 26,981,656 | 17,720,290 | 14,740,261 | 8,807,000  | 6,619,460  | 4,240,973  | 3,117,787  | 2,214,643 |
| COMMERCIAL<br>AND SERVICES           | 5,035,000  | 6,720,500  | 12,921,550 | 12,359,600 | 10,778,700 | 9,853,150  | 12,138,000 | 10,022,300 | 8,206,850  | 5,790,800 |
| CONSTRUCTION<br>AND ALLIED           | 12,588,485 | 12,650,953 | 11,351,405 | 11,464,252 | 9,215,041  | 8,280,331  | 5,369,988  | 4,070,195  | 3,682,888  | 3,077,110 |
| ENERGY AND PETROLEUM                 | 17,317,989 | 13,586,042 | 8,799,316  | 10,185,961 | 7,156,339  | 5,492,876  | 4,172,621  | 3,250,674  | 1,637,349  | 968,666   |
| INSURANCE                            | 6,405,017  | 5,335,897  | 4,326,200  | 3,427,284  | 2,578,615  | 1,751,947  | 1,568,194  | 1,518,373  | 1,466,170  | 1,193,237 |
| INVESTMENT                           | (760,404)  | 1,995,899  | 1,785,425  | 1,582,425  | 1,364,757  | 1,181,031  | 139,236    | 0          | 0          | 0         |
| MANUFACTURING AND ALLIED             | 1,579,942  | 1,392,385  | 1,196,438  | 1,062,300  | 427,136    | 997,824    | 571,444    | 844,517    | 765,060    | 721,968   |
| TELECOMMUNICA<br>TION AND TECHNOLOGY | 68,201,917 | 64,015,128 | 59,940,584 | 56,002,747 | 50,691,160 | 43,403,350 | 36,792,593 | 24,939,307 | 16,928,876 | 0         |

# APPENDIX V: DEBT CAPITAL (Ksh. Billions)

|                      | 2014/13    | 2013/12    | 2012/11    | 2011/10    | 2010/09   | 2009/08   | 2008/07   | 2007/06   | 2006/05   | 2005/04   |
|----------------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| AGRICULTURAL         | 36,519     | 36,519     | 36,519     | 36,519     | 36,519    | 36,519    | 36,519    | 36,519    | 36,519    | 36,519    |
| AUTOMOBILES          | 305,629    | 1,199,598  | 978,866    | 225,081    | 763,853   | 672,214   | 281,453   | 358,657   | 335,207   | 252,240   |
| AND ACCESSORIES      |            |            |            |            |           |           |           |           |           |           |
| BANKING              | 21,488,424 | 16,904,591 | 17,592,000 | 11,658,500 | 5,159,984 | 6,577,684 | 5,324,401 | 5,174,818 | 547,312   | 147,843   |
| COMMERCIAL           | 19,446     | 15,272     | 17,308     | 16,100     | 12,417    | 29,476    | 30,639    | 42,673    | 8,791     | 1,335     |
| AND SERVICES         |            |            |            |            |           |           |           |           |           |           |
| CONSTRUCTION         | 6,608,168  | 2,288,033  | 2,102,573  | 1,634,411  | 1,912,013 | 1,206,214 | 1,365,359 | 907,997   | 255,414   | 253,509   |
| AND ALLIED           |            |            |            |            |           |           |           |           |           |           |
| ENERGY AND PETROLEUM | 6,988,292  | 11,417,088 | 11,098,754 | 11,069,705 | 7,710,982 | 4,100,756 | 3,368,002 | 4,405,318 | 3,085,021 | 1,167,343 |
| INSURANCE            | 686,840    | 652,977    | 647,853    | 622,755    | 603,799   | 492,568   | 0         | 0         | 401,830   | 0         |
| INVESTMENT           | 374,012    | 263,958    | 175,472    | 131,977    | 117,252   | 90,677    | 0         | 0         | 0         | 0         |
| MANUFACTURING        | 0          | 0          | 0          | 0          | 0         | 0         | 0         | 0         | 0         | 0         |
| AND ALLIED           |            |            |            |            |           |           |           |           |           |           |
| TELECOMMUNIC         | 7,513,000  | 8,227,958  | 7,005,542  | 3,016,059  | 9,080,589 | 6,310,721 | 2,719,048 | 0         | 16,726    | 0         |
| ATION AND TECHNOLOGY |            |            |            |            |           |           |           |           |           |           |

|                          | APPENDIX VI: EPS (Ksh.) |       |        |        |       |       |       |        |        |        |  |
|--------------------------|-------------------------|-------|--------|--------|-------|-------|-------|--------|--------|--------|--|
|                          | 14/13                   | 13/12 | 12/11  | 11/10  | 10/09 | 09/08 | 08/07 | 07/06  | 06/05  | 05/04  |  |
| AGRICULTURAL             | 5.12                    | 5.38  | 8.46   | 12.52  | 7.097 | 7.37  | 6.58  | 3.92   | 6.36   | 0.56   |  |
| AUTOMOBILES              | 3.165                   | 5.135 | 4.08   | 4.07   | 5.455 | 4.685 | 5.02  | 4.07   | 3.005  | 4.725  |  |
| AND ACCESSORIES          |                         |       |        |        |       |       |       |        |        |        |  |
| BANKING                  | 5.13                    | 4.205 | 3.685  | 3.255  | 2.345 | 1.49  | 6.325 | 4.185  | 4.77   | 5.265  |  |
| COMMERCIAL               | 7.825                   | 9.675 | 9.74   | 10.175 | 7.1   | -0.92 | 8.685 | 8.235  | 15.95  | 13.4   |  |
| AND SERVICES             |                         |       |        |        |       |       |       |        |        |        |  |
| CONSTRUCTION             | 6.405                   | 6.145 | 7.34   | 8.38   | 11.04 | 12.42 | 6.93  | 7.085  | 4.98   | 3.81   |  |
| AND ALLIED               |                         |       |        |        |       |       |       |        |        |        |  |
| ENERGY AND PETROLEUM     | 4.05                    | 2.61  | -1.405 | 4.375  | 24.69 | 21.26 | 19.41 | 16.605 | 29.07  | 24.935 |  |
| INSURANCE                | 33.07                   | 32.05 | 24.77  | 19.62  | 30.78 | 11.39 | 5.19  | 9.925  | 12.025 | 6.67   |  |
| INVESTMENT               | 7.465                   | 2.08  | 3.39   | 2.28   | 0.645 | 0.17  | 0     | 0      | 0      | 0      |  |
| MANUFACTURING AND ALLIED | 7.81                    | 13.12 | 10.785 | 9.3    | 4.525 | 7.71  | 5.13  | 13.7   | 11.375 | 10.315 |  |
| TELECOMMUNIC             | 1.14                    | 0.88  | 0.64   | 0.66   | 0.76  | 0.54  | 0.35  | 0.3    | 0.62   | 0      |  |
| ATION AND TECHNOLOGY     |                         |       |        |        |       |       |       |        |        |        |  |

# APPENDIX VII: DIVIDEND PER SHARE (Ksh.)

|                                  |       |       |       |       | · · · |       |       |       |       |       |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Dividend per share               | 14/13 | 13/12 | 12/11 | 11/10 | 10/09 | 09/08 | 08/07 | 07/06 | 06/05 | 05/04 |
| AGRICULTURAL                     | 1.33  | 1.33  | 1.87  | 1.95  | 1.27  | 1.13  | 0.47  | 0.267 | 0.6   | 0.27  |
| AUTOMOBILES AND ACCESSORIES      | 0.4   | 0.55  | 0.4   | 0.375 | 0.4   | 0.585 | 0.335 | 0.335 | 0.335 | 0.335 |
| BANKING                          | 1.9   | 1.75  | 1.575 | 1.425 | 1.025 | 0.7   | 2     | 1.35  | 1.3   | 2.4   |
| COMMERCIAL AND SERVICES          | 5     | 5     | 5.125 | 4     | 4.5   | 3.25  | 3.625 | 0.875 | 0     | 0     |
| CONSTRUCTION AND ALLIED          | 6.3   | 5.8   | 4.5   | 4.2   | 5.125 | 6.25  | 3.625 | 3.625 | 3.25  | 3.125 |
| ENERGY AND PETROLEUM             | 0.35  | 0.05  | 0.25  | 0.77  | 4.26  | 4.165 | 6.29  | 1.5   | 1.875 | 1.875 |
| INSURANCE                        | 4.25  | 5.75  | 5     | 3.75  | 4.25  | 3.1   | 0     | 0     | 2.25  | 0     |
| INVESTMENT                       | 0.19  | 1.2   | 0.7   | 0.625 | 0.1   | 0.025 | 0     | 0     | 0     | 0     |
| MANUFACTURING AND ALLIED         | 2.95  | 5.6   | 5.525 | 5.9   | 2.5   | 8.4   | 3.4   | 9.75  | 9.4   | 5.25  |
| TELECOMMUNICATION AND TECHNOLOGY | 0.47  | 0.31  | 0.22  | 0.2   | 0.2   | 0.1   | 0.05  | 0.1   | 0.1   | 0     |

# APPENDIX VIII: TURN OVER (Ksh. Billions)

|                             | 14/13    | 13/12    | 12/11    | 11/10    | 10/09    | 09/08    | 08/07    | 07/06    | 06/05    | 05/04  |
|-----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------|
| AGRICULTURAL                | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| AUTOMOBILES AND ACCESSORIES | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| BANKING                     | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| COMMERCIAL AND SERVICES     | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| CONSTRUCTION AND ALLIED     | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| ENERGY AND PETROLEUM        | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| INSURANCE                   | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| INVESTMENT                  | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| MANUFACTURING AND ALLIED    | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
|                             | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |
| TELECOMMUNICATION AND       | 2,384,33 | 2,257,10 | 2,305,46 | 2,113,88 | 1,951,12 | 1,853,77 | 1,579,90 | 1,356,81 | 1,283,12 | 738,23 |
| TECHNOLOGY                  | 7        | 4        | 7        | 1        | 3        | 9        | 4        | 7        | 0        | 7      |

# APPENDIX IX: TOTAL ASSETS (Ksh. Billions)

|                                      | 14/13           | 13/12           | 12/11           | 11/10           | 10/09           | 09/08           | 08/07           | 07/06          | 06/05          | 05/05          |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|
| AGRICULTURAL                         | 7,330,054       | 5,201,973       | 4,957,099       | 5,189,362       | 4,661,889       | 4,095,869       | 3,696,929       | 1,660,468      | 1,533,807      | 1,036,244      |
| AUTOMOBILES<br>AND ACCESSO<br>RIES   | 5,530,462       | 5,284,959       | 4,552,526       | 2,791,016       | 3,358,300       | 3,109,811       | 7,408,334       | 2,602,145      | 2,370,510      | 2,182,722      |
| BANKING                              | 417,455,16<br>2 | 334,290,29<br>0 | 305,594,39<br>3 | 263,505,08<br>0 | 197,187,10<br>0 | 147,911,77<br>4 | 135,045,29<br>8 | 86,777,777     | 56,275,28<br>6 | 44,885,52<br>6 |
| COMMERCIAL<br>AND SERVICES           | 80,760,976      | 66,879,298      | 38,721,339      | 39,360,408      | 36,635,488      | 37,992,786      | 38,922,309      | 38,646,449     | 34,649,64<br>6 | 22,413,21<br>3 |
| CONSTRUCTION<br>AND ALLIED           | 35129790        | 31922627        | 34995550        | 27025511.5      | 24935449.5      | 22126545.5      | 17283739        | 12612338.<br>5 | 11383664       | 9285332        |
| ENERGY AND<br>PETROLEUM              | 122,012,25<br>9 | 102,639,71<br>4 | 83,408,075      | 83,572,910      | 56,215,050      | 51,426,333      | 43,760,362      | 30,295,653     | 26,039,76<br>0 | 22,110,48<br>4 |
| INSURANCE                            | 49,552,392      | 41,158,346      | 31,945,542      | 24,776,845      | 21,161,791      | 16,277,089      | 13,154,619      | 11,905,823     | 10,054,48<br>0 | 7,643,384      |
| INVESTMENT                           | 10,574,381      | 12,494,699      | 11,364,222      | 11,449,792      | 5,819,766       | 4,518,151       | 169,938         | 0              | 0              | 0              |
| MANUFACTU<br>RING AND ALLIED         | 2,416,742       | 2,418,746       | 2,001,179       | 1,778,394       | 756,083         | 1,682,391       | 1,028,614       | 1,476,121      | 1,366,425      | 1,304,564      |
| TELECOMMUNIC<br>ATION AND TECHNOLOGY | 134,600,94<br>6 | 128,856,15<br>7 | 121,899,67<br>7 | 113,854,76<br>2 | 104,376,04<br>3 | 91,332,223      | 74,366,313      | 56,408,239     | 43,944,94<br>7 | 0              |

# APPENDIX X: COMPANY CAPITALIZATION (Ksh. Billions)

|                          | 14/13    | 13/12    | 12/11    | 11/10    | 10/09    | 09/08    | 08/07    | 07/06    | 06/05    | 05/04    |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| AGRICULTURAL             | 5,550,76 | 3,583,06 | 3,507,71 | 3,617,27 | 1,091,44 | 960,036  | 1,042,93 | 1,840,35 | 1,764,34 | 689,831  |
|                          | 6        | 2        | 1        | 3        | 7        |          | 2        | 8        | 8        |          |
| AUTOMOBILES AND          | 2,622,35 | 2,515,68 | 2,617,91 | 2,413,96 | 2,061,35 | 1,966,35 | 1,725,37 | 1,595,21 | 1,346,91 | 269,175  |
| ACCESSORIES              | 5        | 7        | 2        | 3        | 4        | 8        | 6        | 4        | 4        |          |
| BANKING                  | 67,971,6 | 56,659,0 | 48,398,8 | 39,325,0 | 33,166,8 | 22,855,9 | 20,333,4 | 13,881,6 | 12,298,8 | 5,837,49 |
|                          | 70       | 20       | 63       | 14       | 86       | 63       | 76       | 96       | 18       | 6        |
| COMMERCIAL AND SERVICES  | 4182456  | 3913108  | 3757188  | 3165816  | 2736023  | 2427911  | 2254233  | 2032962  | 1954537  | 1649811  |
|                          | 1        | .5       |          | .5       |          | .5       | .5       |          | .5       |          |
| CONSTRUCTION AND ALLIED  | 21,821,9 | 22,624,3 | 25,130,9 | 20,867,3 | 12,964,0 | 11,017,8 | 9,029,09 | 8,210,46 | 7,644,24 | 6,452,98 |
|                          | 04       | 66       | 69       | 70       | 51       | 05       | 4        | 9        | 6        | 5        |
| ENERGY AND PETROLEUM     | 80,098,5 | 68,316,2 | 48,041,4 | 48,767,8 | 36,276,7 | 31,470,7 | 25,466,2 | 16,770,5 | 15,838,2 | 14,771,9 |
|                          | 77       | 84       | 61       | 22       | 65       | 88       | 58       | 98       | 16       | 84       |
| INSURANCE                | 10,128,3 | 8,339,59 | 5,664,30 | 4,417,14 | 3,704,94 | 2,559,48 | 2,084,23 | 2,439,07 | 1,696,58 | 1,401,40 |
|                          | 32       | 9        | 0        | 6        | 3        | 1        | 3        | 1        | 7        | 3        |
| INVESTMENT               | 7,770,41 | 7,042,73 | 6,423,54 | 5,757,58 | 2,818,78 | 1,891,37 | 151,587  | 0        | 0        | 0        |
|                          | 0        | 9        | 8        | 1        | 3        | 6        |          |          |          |          |
| MANUFACTURING AND ALLIED | 1,952,03 | 2,006,75 | 1,559,54 | 1,412,68 | 1,455,77 | 1,394,23 | 1,217,60 | 1,161,31 | 1,100,74 | 1,070,00 |
|                          | 6        | 6        | 1        | 9        | 7        | 6        | 4        | 2        | 9        | 0        |
| TELECOMMUNICATION AND    | 97,611,7 | 93,703,7 | 84,283,7 | 79,737,0 | 70,300,8 | 55,921,6 | 49,122,5 | 43,224,3 | 33,005,5 | 0        |
| TECHNOLOGY               | 74       | 50       | 77       | 36       | 80       | 60       | 93       | 07       | 49       |          |

# March, 2017



# APPENDIX XI: RESEARCH AUTHORIZATION LETTER

#### **APPENDIX XII: RESEARCH PERMIT**

