

**EFFECTS OF DIVIDEND PAYOUT ON FINANCIAL PERFORMANCE OF  
LISTED AGRICULTURAL FIRMS IN KENYA**

**BY**

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS OF THE DEGREE OF MASTER OF BUSINESS  
MANAGEMENT OF THE DEPARTMENT OF BUSINESS STUDIES,  
RONGO UNIVERSITY**

**NOVEMBER 2017**

## **DECLARATION**

### **Declaration by the candidate**

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## **DEDICATION**

To my late father Elly Seda Anyona.

## **ACKNOWLEDGEMENT**

I am grateful to my supervisors for supporting me; their input in my future cannot be forgotten. Prof Nyangosi and Prof. Ongong'aya your limitless support, valuable contribution, guidance and providing feedback which has helped me to get to the finishing line of this thesis. Thanks.

## ABSTRACT

Several Theories have been documented on the relevance and irrelevance of dividend policy. An interesting issue, not yet explored, is the empirical evidence of effects of dividend payout on financial performance. Financial performance has always been considered as a primary indicator of dividend payout ratio. There are various other factors other than financial performance that may also affect dividend decisions of an organization namely growth opportunity, Liquidity, Leverage and Firm Size. Available literature suggests that dividend payout is positively related to profits, liquidity and it has inverse relationship with Firm size, growth and Leverage. This research is an attempt to analyze the effects of dividend payout on financial performance on Kenya Agricultural sector, it focused on identifying effect of dividend payout variables as per literature on financial performance of Agricultural sector in Kenya in existing scenario or not. Statistical techniques of correlation and regression were used to explore the relationship between key variables. Thus, the main theme of the study was to identify the various variables of dividend payout and how they affect financial performance of Agricultural firms in Kenya listed on Nairobi Securities exchange. The study covered the period from 2008-2012. The objective of the study was achieved by trend analysis of dividend payout variables and using multiple regressions because it is the best method to use when dealing with micro-units in the economy. Panel data, cross-sectional time series data from financial reports in NSE libraries and CMA libraries was collected and stored in Microsoft Excel 2007, data analysis was carried out using the Statistical Package for Social Scientists (SPSS) version 17.0. The results show positive relationships between dividend payout and financial performance. The results also show negative associations between dividend payout and firm's growth, Firm size and leverage. The study further recommends studies on major causes of instability of dividend payout in agricultural firms listed in NSE and contribution of dividend payout to delisting of firms from NSE though it's a requirement for firm's to be listed.

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## **LIST OF ACRONYMS**

CMA : Capital Market Authority

EPS : Earnings Per Share

GRWTH : Growth rate

LLSV : Lunar Logistics System Vehicle

LSDV : Least Squares dummy variables

MTBV : The market –to –book value

NPV : Net Present Value

NSE : Nairobi Securities Exchange

NYSE : New York Securities Exchange

OLS : Ordinary Least Square

SPSS : Statistical Package for Social Scientists

## **OPERATIONAL DEFINATION OF TERMS**

**Earnings per share:** Are the portion of a company's profit allocated to each outstanding share of common stock.

**Dividend:** The term dividend is a distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. The dividend is most often quoted in terms of the amount each share receives (dividends per share).

**Dividend payout ratio:** is the amount of dividends paid to stockholders relative to the amount of total net income of a company.

**Dividend per share:** Is used to measure the amount of the dividend that shareholders have or will receive for each share they own thus measuring the shareholders value.

**Dividend yield:**Is a company's total annual dividend payments divided by its market capitalization, assuming the number of shares is constant and often expressed as a percentage.

**Financial performance:** Firm performance measured in terms of profitability and liquidity.

**Liquidity:** The degree to which an asset or security can be bought or sold in the market without affecting the asset's price. Liquidity is characterized by a high level of trading activity. Assets that can be easily bought or sold are known as liquid assets. Ability to pay debts as they fall due.

**Market-to-Book:** The market-to-book ratio is computed as the market value of assets divided by the book value of assets. Market value of assets is defined as the book value of assets less the book value of equity plus the market value of equity.

**Net Assets:** Referred to as net worth, is the shareholders' equity = assets minus liabilities. Net assets mean the owners' equity or in other words shareholders' equity in a company Balance sheet. The logic behind to use the term "Net assets" instead of "Shareholders' equity" is that, by

definition of Financial Accounting Standards Board (FASB) net assets is what residual value left for company owners after deduction all liabilities from all assets.

**Pay - out Ratio:** The amount of earnings paid out in dividends to shareholders.

**Population:** A research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done.

**Profitability:** Ability to earn income on invested funds.

**Return On Assets (ROA):** Earnings before interest, finance charges and tax.

**Return On Equity (ROE):** ROA minus interest, finance charges and tax.

## CHAPTER ONE

### 1.1. Background to the Study

Financial performance remains important to any enterprise. Financial performance in this regard reflects the profitability of a firm which as observed by Baker et al (2001) can be viewed as how well the firm enhances its shareholder's wealth and the capability of the firm to generate earnings from the capital invested by shareholders. This then brings into mind the dividend payout policy that the firm holds as enhancing shareholders' wealth and profit is viewed as a key objective of a firm. Baker et al (2001) further note that dividend policy can affect the value of the firm and in turn the wealth of shareholders. Basically, the Kenya Gazette legal notice No. 60 (2002) made it mandatory for any company wishing to be listed in the Nairobi securities exchange to have a clear future dividend payout policy. The NSE annual report of 2012-2013 (NSE, 2013), it becomes apparent that many agriculture companies listed at the NSE do not pay dividends consistently, and whenever they do pay, the level of payout remains very low contrary to investor expectations.

Recent studies on dividend policy have concentrated on emerging markets and particularly on the African context. In a study investigating determinants of dividend policy in the African stock exchange, Nnadi et al (2012), found out similarities in the determinants of dividend policy in African firms with those in most developed countries. More specifically, the study identified agency costs as the most dominant determinants of dividend policy among African firms. Other factors were however not to have an influence on capital policy among African firms and include level of market capitalization, age and growth of firms, as well as profitability.

In a study conducted on companies in the Nairobi securities exchange, Waithaka, Ngugi and Aiyabei (2012), investigated the effects of dividend policy on share prices. Defining, dividend policy as management's long term decision on how to deploy cash flows from business activities, these scholars established that higher pre-tax risk adjusted returns affected tax incentives and those investors whose portfolios had low systematic risk preferred high pay out stocks. Further, the study revealed that an increase in firms stocks trading volume affected the share price and investors who wanted current investment income owned shares in high dividend payout firms. In yet another study conducted on the Nairobi securities exchange, Musiega et al (2013), examined determinants of dividend payout policy among non-financial firms. The study concluded that current earnings, profitability growth opportunities, firm size and business risk, are the main determinants of dividend payout for non-financial firms.

Several studies focusing on dividend policy globally confirms how wide spread and severe the issue of dividends remains across a multitude of firms. Various studies confirm determinants of dividend policy among firms which many firms trading in securities markets ought to be familiar with. Questions however linger as to how the choice of type, amount and form of dividend given to shareholders can effect on a firm's profitability. There is therefore a need to establish the effect of dividends payout on the performance of agricultural firms.

Delisting and cross listing remain key developments of concern. According to the CMA annual report (CMA, 2009), Unilever Kenya Ltd exited from the bourse in January, 2009. Earlier in 2003, both East African Packaging Ltd and African Lakes Corporation delisted. African Tours and Hotels Ltd were put under receivership in 1998 there after rebranding to Kenya Safari and



Lodges. Considering that a positive correlation exists between dividend payout policy and firm performance and hence shareholder value (Kivondi&Oyugi, 2013). Interest should then focus on reasons that make companies delist and the extent to which dividend payout policy contributes to firm financial performance. The purpose of this study is therefore to establish how different dividend payoutimpacts on the financial performance of firms listed at the NSE under the agricultural sector.

### **1.1.2. Dividend Payout Policy**

According to David (2006), dividend payout policy connotes to the payout policy which managers pursue in deciding the size and pattern of cash distribution over time. Although each company is expected to outline its own dividendpayout policy, the decision to pay dividends as noted by Firer et al (2012) rests in the hands of the board of directors of the company. This then explains the differences that occur in terms of profitability and hence financial performance among listed firms. Erasmus (2012) observes that there is need for management to be aware of the fact that unexpected changes in dividend payout could alienate existing and potential investors and may impact investor’s perception of the company performance in financial markets, thereby leading to decline in financial performance.

In a study by Pandey (2004), dividends payout relate to earnings distributed to shareholders. This is usually depended on individual companies which formulate their own policies. Such policies may or may not require reinvestment or distribution of dividend to stockholders. This then implies that the dividend policy adopted by the company has a bearing on the proportion of earnings to be distributed to the shareholders by way of dividends and what proportion should be

reinvested. The essence then is that each company requires a policy that can give shareholders a fair payment on their investments.

### **1.1.3. Financial performance.**

Financial performance refers to the level of profitability or wealth creation by a business firm (Barbosa and Lauri, 2005). Traditionally, financial performance is measured using profitability ratios like return on assets (ROA) and Return on Equity (ROE) as well as liquidity ratios like current ratio (CR) and Quick Ratio (QR). Liquidity refers to the ability of a business to pay its debts as they fall due.

### **1.1.4. Agricultural Firms**

Agriculture is a major source of Kenya's food security and a contributor to off farm employment though has been coupled with a decline in production for past few years. Most firms in the agricultural sector have not lived to the expectation of the shareholders due to unpredictable and low dividend payout. According to the Kenya Economic Report (2013), Kenya's economy is dependent on agriculture, which as noted in the report contributes to rural employment, food production, foreign exchange earnings and rural incomes. The report indicates that as at 2013, the agricultural sector directly accounted for 26 percent of Kenya's Gross Domestic Product (GDP), and indirectly accounted for 27 percent through linkages with manufacturing distribution and other service related sectors. In addition, the sector accounted for 65 percent of Kenya's total exports 18 percent and 60 percent of formal and total employment, respectively.

The agricultural sector remains critical to the economic and social development of Kenya. The report indicates that as at 2013, the agricultural sector directly accounted for 26 percent of

Kenya's Gross Domestic Product (GDP), and indirectly accounted for 27 percent through linkages with manufacturing distribution and other service related sectors. In addition, the sector accounted for 65 percent of Kenya's total exports 18 percent and 60 percent of formal and total employment, respectively. A comparison of the payout ratio in percentage among the listed agricultural firms reveal, over a period of years from 2008-2012 that the listed agricultural companies vary greatly in the payout ratio. In addition the payout ratio varies considerably within the same company over time. Literature however fails to focus on comparing this variability in payout ratio among firms and whether it has any telling impact on the company's sustainability of dividend payout.

#### **1.1.5. Dividend Payout among Agricultural Firms Listed at the NSE**

As noted in the NSE handbook 2012-2013, seven companies were trading at the NSE as at that time. An examination of the dividend payouts of these companies reveals that there was a large variance in terms of dividend payout among the firms (Table 1.1). This variance could be as a result of various factors and may impact differently on financial performance of the firms in question. This provides a basis of examining financial performance in relation to dividend payout.

**Table 1.1: Dividend Payout Ratio among Agricultural Firms Listed at the NSE**

Company	2008	2009	2010	2011	2012
EAAGARDS	0.00	42.44	-	14.00	92.17
KAKUZI	11.00	14.00	16.00	13.00	19.00
KAPCHORUA TEA	(14.02)	36.37	17.56	15.69	37.63
LIMURU TEA	70.87	33.37	12.03	22.23	8.84
REA VIPINGO	0.07	0.20	0.71	0.14	0.17
SASINI	0.00	15.45	16.38	13.11	-
WILLIAMSON TEA	(4.49)	31.88	6.25	(26.74)	7.68

Source: NSE (2013)

### 1.1.6. Nairobi Security Exchange

Established in 1954 as a Stock Exchange based in Nairobi Capital of Kenya. The NSE was established to meet a number of objectives among them: to provide an alternative method of raising capital to small, medium sized and young companies that find it difficult to meet the more stringent listing requirements of the Main Investment Segment Market (MIMS), facilitate the liquidity of companies with a large shareholder base through „introduction“, that is, listing of existing shares for marketability and not for raising capital and also offer investment opportunities to institutional investors and individuals who want to diversify their portfolios and to have access to sectors of the economy that are experiencing growth and creates a conducive environment through capital markets and its'one of the fast growing economies in Sub-Saharan Africa.

The Nairobi Securities Exchange (NSE) assists liquidity provision, in price discovery, and reduction in transaction costs among others. It also facilitates the inflow of foreign financial

resources into the domestic economy (Yantey&Andjasi, 2007).Although still in its nascent stages, the NSE plays a significant role in the economic development of Kenya. Through the NSE, domestic savings are mobilized and used to align through reallocation of financial resources from dormant to active agents. In addition and as reported by Capital markets Authority (2012), the NSE enhances the inflow of international capital as well as facilitating government privatization programs.

On the basis of the capital markets authority report (2012), the NSE is categorized into three market segments namely; Main Investment Market Segment (MIMS); Alternative Investment Market Segment (AIMS); and the Fixed Income Market Segment (FIMS). According to the same source (CMA, 2012), The Main Investment Segment is the main quotation market and has listed companies categorized into the agricultural industrial and allied, finance and investment and commercial and services sectors. On the other hand, the alternative investment market segment provides an alternative means of capital for small, medium and upcoming companies that feel challenged by the stringent listing requirements of the main investment market segment. Further, the fixed income market segment acts as the independent market that cater for fixed income securities which include; treasury bonds, corporate bonds, preference shares and debenture stocks, treasury bills and commercial papers (NSE, 2012)

The securities market has been associated with the agricultural sector for a long time, with Kakuzi being among the listed companies at the onset of the stock market in 1954. Currently, seven agricultural companies are listed on the NSE markets. These are Eaagads, Kakuzi, Kapchorua Tea, Limuru Tea, Rea Vipingo, Sasini and Williamson Tea.

A comparison of the payout ratio in percentage among the listed agricultural firms reveal, over a period of years from 2008-2012 that the listed agricultural companies vary greatly in the payout ratio. In addition the dividend payout ratio varies considerably within the same company over time. Literature however fails to focus on comparing this variability in payout ratio among firms and whether it has any telling impact on the company's sustainability of dividend

## **1.2 Statement of the Problem**

The relationship between dividend payout policy and financial performance has been studied in many parts of the continent, despite the considerable attention that the issue of dividend payout policy has received; few studies have examined dividend payout made out across various companies while distinguishing between market sectors. This distinction is important since companies from different sectors vary quite significantly in relation to exposure to risks due to diversified environment, operational activities and financial activities, all of which have an effect on dividend payout policy. Distribution and retention of profits is one of the most important financial decisions that manager's make on day to day work. This is because a firm's dividend payout policy has potential implications for share prices and also affect returns to shareholders, the financing of internal growth and the equity base through retentions together with its gearing and leverage (Omran and Pointon, 2006). This position had earlier been amplified by Frankfurtet and McGoun (2002) when they concluded that the dividend puzzle, both as a share value-enhancing feature and as a matter of policy is one of the most challenging topics of modern financial economics.

Researchers have different views on whether profits distribution and retention basically affects the share prices and financial performance of a firm in the long run. Dhanani, (2005) who used a

survey approach to capture managerial views and attitudes of corporate managers regarding distribution and retention of earnings, found that dividend policy serves to enhance corporate market value. However, Farsio et al., (2004) argues that empirical studies that conclude a causal relationship exists between earnings and dividends are based on short periods of time and are therefore misleading to potential investors. Therefore, they found that, distributed earnings have no explanatory power to predict future earnings. On the one hand, high retained cash flows may have low persistence if they are derived by opportunistic earnings management (accounts receivables securitizations, transfers in and out of trading securities, delay of payments to suppliers) (Richardson, 2006). He further points out that high retained cash flows may also have a negative impact on future profitability since they could be associated with future overinvestment. Consequently, it is necessary to investigate the effect of distribution of earnings on future performance of firms in developing country such as Kenya. In Kenya, few empirical studies have been done to establish the effect of dividend payout on financial performance zeroing down to Agricultural sector while there are just a few which are listed so far. From the information conveyed in the NSE annual report of 2012-2013 (NSE, 2013), it becomes apparent that many agriculture companies listed at the NSE do not pay dividends consistently, and whenever they do pay, the level of payout remains very low contrary to shareholder expectations. The purpose of this study is therefore to establish effect of dividend payout variables on the financial performance of firms listed at the NSE under the agricultural sector.

### **1.3 Objectives of the Study**

The general objective of the research was to establish the effect of dividend payout policy on the financial performance of Agricultural firms listed Nairobi Securities Exchange. In order to establish the effect of dividend payout in this sector, the following objectives were addressed.

- I. To establish the effect of earnings per on financial performance of agricultural firms listed at the Nairobi Securities exchange
- II. To determine the effect of dividend yield on financial performance of agricultural firms listed at the Nairobi Securities Exchange.
- III. Determine the effect of dividend per share on the financial performance of agricultural firms listed at the Nairobi Securities Exchange.
- IV. To establish the effect of dividend payout ratio on the financial performance of agricultural firms listed at the Nairobi Securities Exchange.

#### **1.4. Hypotheses of the Study**

The following hypotheses were tested:

**H<sub>01</sub>:** Earnings per share have no significant effect on financial performance of agricultural firms listed at the NSE

**H<sub>02</sub>:** Dividend yield has no significant effect on financial performance of agricultural firms listed at the NSE.

**H<sub>03</sub>:** Dividends per share have no significant effect on financial performance of agricultural firms listed at the NSE.

**H<sub>04</sub>:** Dividend payout ratio has no significant effect on financial performance of agricultural firms.

#### **1.5. Significance of the Study**

By establishing the effect of dividend payout on agricultural firms, the findings of this study has made contributions to existing knowledge in terms of theoretical, managerial and strategic



grounds. Theoretically, the study finding provides an avenue through which further examination of the dividends irrelevance theory can be conducted.

The study findings is useful to management of agricultural firms in that it provides a framework for comparing different types of dividend payout components with a view to predicting dividend payout that maximizes company financial performance and shareholder value within the sector. Besides, the findings have drawn a distinction between the various agricultural companies based on type of dividend payout preference. This enables management to come up with strategic decisions pertaining to the dividendpayout policy of the firm.

#### **1.6. Scope and Delimitations of the Study**

Since the number of companies listed at the NSE is potentially too broad for effective coverage in a single study, the geographical scope of the study was delimited to those companies listed within the Agricultural sector. This would make comparison among the seven companies listed in the Agricultural sector to be viable.

#### **1.7. Limitations of the Study**

The key limitations were,first the study relied on secondary data collected from the NSE via its annual reports. This was limiting in the sense that several companies operating under the agricultural sector but not listed at the NSE were not be considered hence interfered with generalization of the study findings. Second, the multiple regression modelswas be used to examine the individual contributions of the identified antecedents. As a statistical measure, regression analysis faces the limitation of parameter instability in which relationships between

variables tend to change with time. Quantitative technique was used which provided less details on behavior, attitudes, and motivation and results were limited as they provided numerical descriptions rather than detailed narrative and generally provided less elaborate accounts of human perception.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

This chapter presents literature review conducted to get a clear understanding of the research problem and to also identify gaps that may exist in the studies that have been conducted under related theme. First a general review is conducted focusing on the broad variables under study and finally zeros down on studies conducted on dividend payout and on financial performance. Finally the chapter also reviews literature on the variables related the proposed study. This includes an examination of the empirical review of studies relating earnings per share, dividend yield, dividend per share, and dividend payout ratio on financial performance.

#### **2.2. Theoretical Literature Review**

These are theories that support the research study; it introduces and describes the theory that explains why the research problem under study exists. A theoretical framework consists of concepts and, together with their definitions and reference to relevant scholarly literature, existing theory that is used in this particular study.

##### **2.2.1 The Concept of Dividend Payout**

Shareholders behavior remains key to a firm's profitability in that it has the capability to influence investors' decisions on choice of investment options available at a time. Differences in earnings after tax of firms listed at the securities exchange could be a factor that influence investment decisions depending on the return on investment one may need. Considering this, dividend payout policy stands out as a major variable that could have a bearing on investor

behavior and share prices at NSE. M-M Irrelevance states that the dividend payout is irrelevant to the value of the company. It is clear that the value of a company is not affected by the types of cash outflows it made but influenced by the sum of the cash inflows and the riskiness of the company. Moreover Irrelevance Theory shows that the investors are also not influenced by the decision of the management of the company regarding the way of giving the return either in the form of dividend yield or in capital gain yield.

Dividend payout has been defined as annual payments declared and effected to shareholders on the basis of outstanding stock holding at the end of a financial year (Chong & Lal, 2011).

According to Dayhaand McConnel (2003) therefore, dividends are distributed to shareholders when all investment projects with positive net present values have been financed. Dividend payout is embedded in dividend policy of a company and aims at maximizing investor confidence. This conformsto Walter's model which states that the choice of dividend policies almost always affects the value of the enterprise and there is important relationship between the firm's internal rate of return ( $r$ ) and its cost of capital ( $k$ ) in determining the dividend policy that will maximise the wealth of shareholders. According to Davis (2006), the decision by managers on the quantum and pattern of cash distribution to the shareholders is actualized within the dividend policy framework. On the other hand, Capstaff et al., (2004) define dividend policy as a practical approach which treats dividend payable as an active decision variable and retention only as residue.

The central nature of dividend payout as embedded in dividend policy is further enumerated by Waithaka et al (2012). These authors contend that dividend policy should suggest a positive attitude for a deliberate maintenance or increase in dividend to a level that ultimately sustains the

price of ordinary shares in the stock exchange and therefore enhance confidence of existing and potential investors. The essence is that as observed by Kivondi and Oyugi (2013), an increase in dividend would result to an increase in the earnings thereby necessitating a dividend policy that could enhance firm performance and therefore investor confidence and shareholder value.

Pandey (2008) asserts that a securities dividend is the distribution of shares in addition to or in lieu of cash dividends which the company pays. Accordingly therefore, the shares distributed should be within the authorized share capital and should be given in proportion to the company's existing shareholding. Dividend payout is being linked to firms' life cycle. According to Grullon, G and Michaely, R., (2002), firms that increase dividends experience a future decline in their profitability. On the contrary, firms experience an increase in profitability. This then poses a dilemma for most firms. While most of them endeavor to increase profitability, they also hope to attract investors. The essence then is that when investment opportunities are exhausted, dividends are increased even at the expense of profitability.

The use of dividends as investment options across firms varies considerably. Firms choose dividends basing on a host of reasons. According, Chay and Suh (2008) observe that only firms with low cash-flow uncertainty feel comfortable in committing to paying dividends. This is further supported by Brav et al (2005). Other findings (Hoberg&Prabhala, 2008) also posit that disappearance of dividends is associated with an increase in idiosyncratic risk.

The view that decline in idiosyncratic risk is related to firm maturing finds support from several other studies. Denis and Osobov (2008) note that firms are more likely to pay out dividends when their equity is earned through operations rather than contributed by investors, on the contrary, studies by Von Eife and Megginson (2007) on firms in the EU failed to give conclusive findings. Survival of firms depended on dividend payout for investor confidence relies mainly on

behavioral biases. Literature reveals that demand for dividends by investors varies over time (Baker and Wurgler, 2004). This is noted to possibly be as a result of time varying risk preferences or sentiment. Thus in low-sentiment periods such as recessions, it is postulated that investors may opt for 'safer' dividend paying stocks, while in good times such as during booms, they may prefer 'riskier' stocks that invest earnings rather than distribute them.

Despite the abundance literature reflecting on dividend payouts, little information comes out regarding the comparative performance of firms on the basis of dividend payout. This is in spite of practitioners commonly holding the view that dividend yield (annual per share dividends scaled by the share price) is a yardstick for valuation (Baskin, 1988). The question that remains unanswered is how dividend payout compares across companies trading in securities and whether this would be an indicator for remaining listed at the securities market

### **2.2.2. The Concept of Financial Performance**

There are several definitions that define financial performance of firms. Shi Qi (2009), argues that financial performance of a firm refers to the operating results within a concise period. Thus he argues that within the specific period, financial performance can reflect the situation of profitability, asset quality, financial risk and business growth conditions among others. On the other hand, Zhang (2010) states firm's performance as the reflection of outcomes of the firm during a given operating period measured using financial ratios. Never the less, what comes out significantly is that earnings are the major measure of firm's future financial performance. There are various ratios that defined and specifically focus on firm profitability in as far as it determines firm performance. A variety of such financial ratios have been employed to evaluate

the operating effectiveness of a firm. Return on Assets (ROA) ,on the one hand has been fronted as a measure of how efficiently assets are used by calculating the return on total assets used to generate profit (Maryanee& Don, 2006). Return on Sales (ROS), on the other hand ,has been labeled as the sum of net sales less cost of goods sold divided by net sales (James & John, 2005). This indicates that ROS is used to show financial performance of the firm by relating the profit to sales, after deduction of cost of production. Consensus, however remains elusive on the selection of the ideal firm performance ratio. Early scholars focused on return on shareholding basing on the capital market transaction data (Moskowitz, 1975; Vance, 1975). Others like Bowmen (1978) used accounting ratios such as return on assets (ROA), return on equity (ROE), and earnings per share (EPS). Recent scholars have shown preference for ROA, ROE and ROS as measures of firm profitability. According to Barry et al (1995), ROA is a widely used measure of financial performance since it can be influenced by many aspects of agricultural firms.

Quan, Qui and Zhang (2009), in analyzing external factors affecting business performance pointed out that return on assets (ROA) reflects the financial position and profitability better. This line of thinking was further expressed by Peters and Mullen (2009). Tobin-Q is also a ratio that has in recent times been used to measure performance particularly if the required performance is of long term nature (Fu, 2011).The agricultural sector unlike many other sectors, suffers from uncertain conditions. One of the major problems then remains monitoring of this sector. Recent literature in the agricultural sector focuses mainly on implications of issues such as reduction of subsidies (Vrolijk et al, 2010); the risk of diminishing agro-biodiversity (Schroder et al, 2007); investment support for agriculture (Berg Schmidt et al, 2009); and sustainable value of agriculture (Burja et al, 2010) ,among others.

A study by Dhanani (2005) revealed that dividend policy is important in maximizing shareholder value. A firm's dividend policy can influence one or more of imperfections in the real world such as information asymmetry between managers and shareholders; agency problems between managers and shareholders; taxes and transaction costs and in turn, enhance the firm's value to shareholders (Dhanani, 2005). In an imperfect market setting, dividend can influence shareholders' wealth by providing information to investors or through wealth redistribution among shareholders (Travlos et al., 2001; Adesola & Okwong, 2009). A firm's dividend policy can influence its capital structure or investment decisions and in turn, enhance the firm's value to shareholders (Baker et al., 2001). Shareholder's wealth is maximized through effective investment strategies, financed by an optimal capital structure. Dividend policy can be viewed as a result of the investment and financing decisions since the company needs to decide how to distribute wealth generated from these strategies (Dhanani, 2005). The relationship can also be inverse, where dividend policy influences a firm's capital investment and structure decisions and in turn its value enhancing properties. According to Bird in hand theory presented by Gordon & Linter the company should try to pay the higher dividend in order to increase its wealth or value. The reason behind this is that the dividend income is considered to be more regular, immediate and least risky in comparison with the capital gain income which is not certain. So, the dividend payout should be kept high by the company.

Aivazian et al., (2003) state that since corporate investment is sensitive to financial constraints, a firm's dividend decisions, which directly affects its free cash flow, could affect its investment. This arises when a firm's dividend policy viewed as a residual to its capital structure and investment decisions; internally generated cash flows from existing investments will be used to



optimize a the firm's capital structure and future capital investment decisions and any surplus returned to shareholders as dividends (Dhanani 2005). The pecking order theory of capital structure proposes that companies will prefer internally generated cash flows to external funds and therefore pay low dividends. It therefore suggests that firms that pay high dividends experience low growth which contradicts studies by Zhou & Ruland (2006) and Arnott & Asness (2003). The equity component of a firm increases when more earnings are retained. However, if a firm has a large payout, financing may need to come from debt. An increase in debt without a proportionate increase in equity may result in a deviation from a firm's optimal capital structure (Baker, 2001).

A firm's dividend policy can reduce agency problems between managers and shareholders and, in turn, enhance the firm's value to shareholders (Dhanani 2005). Dividends are a way to solve agency problems where managers can use excess free cash flows to pursue their own interests. By paying dividends to shareholders, free cash flows are reduced and thus managers have no opportunity to make suboptimal investments (Bartram et al., 2009 & DeAngelo et al., 2006). A firm's value and financial performance is increased through higher returns from maximum investments by shareholders. Dividend payments force firms to raise funds externally for new investments, which in turn increases the level of external monitoring of corporate activities by the capital market regulator (Jiraporn et al. 2011). There is thus improved corporate governance which has a positive effect in the firm's financial performance.

A firm's dividend policy can take into consideration the different circumstances of its shareholders and in turn, enhance the firm's value to these shareholders (Dhanani, 2005). Depending on the preferences of shareholders, firms can formulate a dividend policy whether

stock or cash that meets the needs of its shareholders, hence dividends may not provide information about future earnings, but rather create a clientele that are drawn to firms with their preferred dividend policy. Malcolm and Wurgler (2004) demonstrate that firms design dividend policy in response to shareholders' preference for dividends. Certain shareholders may have a preference for cash dividends, others for dividend stability and others would prefer capital gains earned through reinvestment of dividends and thus no cash dividends. This may be explained by the bird in hand fallacy as investors may deem dividends a more current and certain return than capital gains (Amidu, 2007 & Howatt et al., 2009). Individual investors' tax preferences may also influence their dividend preferences. Investors afraid of higher taxes are likely to prefer low or no dividend payouts in an attempt to reduce their taxable income thus preferring capital gains (Howatt et al., 2009). In Kenya dividends are taxed at 5% as a final tax for individuals while capital gains tax are tax exempt (Income Tax Act, 2010). However, Amidu (2007) argues that, if investors migrate to firms that pay the dividends that most closely match their needs, no firm's value should be affected by its dividend policy. Thus, a firm that pays no or low dividends should not be penalized for doing so, because its investors do not want dividends. Conversely, a firm that pays high dividends should not have a lower value, since its investors like dividends. This argument assumes that there are enough investors in each dividend clientele to allow firms to be fairly valued, no matter what their dividend payout policy is. Firms with many good investment opportunities or the young firms have high cash needs, which may lead them to payout a low fraction of earnings to shareholders as dividends (Smith and Watts (1992); Gaver and Gaver (1993); La Porta et al. (2000). The value of future growth opportunities is augmented as far as a firm can exploit imperfections in the products and capital markets.

### **2.2.3.Dividend Payout and Financial Performance**

As already noted, a firm's performance can be measured by the earnings after tax generated by the company in terms of profits. Dividend payout has been noted in the substantial literature to be related to profitability and by extension to firm performance. According to Barron (2002), generation of real earnings by companies is manifested in healthy dividend payout. Indeed, Zhou and Ruland (2006) contend that high dividend payout firms tend to experience strong future earnings but relatively low past earnings growth despite market observers having a contradicting view. Arnott and Asness (2003) in their study found out that future earnings growth has a positive correlation with dividend payout. In their conclusions, they observed that high dividend payout ratios are directly proportional to expected future earnings growth. Consequently, expected future earnings growth is fastest when current payout ratios are high and slowest when payout ratios are low. In trying to understand the cause of the positive relationship between dividend payout and future earnings growth, Arnott & Asness (2003) postulated that the positive relationship between current dividend payout and future earnings growth is based on the free cash flow theory. Low dividend resulting in low growth may be as a result of suboptimal investment and less than ideal projects by managers with excess free cash flows at their disposal. Besides, Arnott & Asness (2003) further noted that when managers are reluctant to cut dividends, this tends to lead to the positive relationship between dividend payout and growth in future earnings. In essence therefore, a high payout ratio indicates management's confidence in the stability and growth of future earnings and a low payout ratio suggests that management is not confident of the stability of earnings or sustainability of earnings growth. Managers therefore pay low dividends to avoid dividend cuts when earnings drop.

Farsio et al. (2004) take a different view with regards to the relationship between dividends and future earnings. In their view, such a relationship can only remain significant in the short run and may be misleading to investors. In their arguments, they posit three scenarios. First, they point out that an increase in dividends may lead to a decline in funds that are to be reinvested by the firm. Firms that pay high dividends without considering investment needs may therefore experience lower future earnings (Farsio et al., 2004). There is thus a negative relationship between dividend payout and future earnings. Second, an increase in dividends in a quarter may be the result of the management's policy to keep investors satisfied and prevent them from selling the stock at times when future earnings are expected to decline or current losses are expected to continue (Farsio et al., 2004). This is a case of rising dividends followed by declining earnings. Lastly, an increase in dividends may be the result of good performance in previous periods which may continue into the future (Farsio et al., 2004). This supports the view of a positive causal relationship between current dividends and future earnings. The contradictory arguments provided require a thorough interrogation of the suitability of dividend policy of a firm in relation to firm performance. The issue however remains how the key ratios that are the antecedents of dividend payout affect performance.

### **2.3. Empirical Literature Review**

Empirical review of literature focuses on establishing the interrelations between the conceptualized independent variables and financial performance.

### **2.3.1 Earnings per Share and financial performance**

Earnings per share are computed by dividing earnings after interest, depreciation, and taxation by the total number of outstanding shares (Bhatt & Sumangala, 2012). According to these authors, dividend may be distributed out of these earnings. Earnings per share can therefore be considered as a measure of market value of the equity share. Zhang (2008) views earnings per share (EPS) as one of the most widely used accounting number. According to this author, it presents a company's current and future potential debt and provides stakeholders with information on the portion of earnings that belongs to each share. Literature on earnings to each share has mainly focused on what it portends for stock returns. Several studies conducted in the early 90s demonstrated a positive relationship between earnings and stock returns (Easton & Harris, 1991; Ohlson, 1991; Ball, Kothari & Watts, 1993).

Several other studies have used different methodologies but often arrived at conclusions showing positive relationship between earnings and stock returns. Using annual earnings and returns data from 1950 to 1988 for the US market, Ball, Kothari and Watts (1993) were able to conclude that changes in earnings were likely to be associated with variations in securities expected returns.

In a study focusing on the German market, Booth, Broussard and Loistl (1997) investigated the relationship between stock returns, earnings and a variant of earnings. They found out that while both earnings had a positive effect on stock returns a variant of earnings was more significant. Focusing on emerging markets, Vafeas, Trigoergis and Geogian (1998) found out that earnings levels as well as changes in earnings were important in exploring stock returns on the Cyprus stock market. Comparative studies also exist seeking to investigate the impact of earnings among companies and between regions. Examining the impact of ownership characteristics on return-

earnings in Japan, Cheung, Kim and Lee (1999) found that return-earnings association was positively affected by the extent to which a company's shares are owned by foreign investors. Besides, they also provided evidence that reported earnings were less in value relevant in Japan than in the US. Focusing on the relationship between stock and prices and accounting earnings and book value, Graham and King (2000) found differences in explanatory power of book values per share and residual earnings per share for firm values across six Asian countries under study.

In a study on the relationship between accounting numbers and returns in the Baltic stock markets, Jarmalaite (2002) found out that the association between returns and earnings differed substantially among the three countries namely; Lithuania, Latvia and Estonia. Chen and Zhang (2003) in a study focusing on the explanatory potential of earnings on returns found out that capital investment is an additionally important variable in explaining returns beyond earning levels and profitability change. This then implies that the earnings per share ratio would appear small simply because some of the dividends would have been rechanneled back into the firm as capital. The evidence provided focuses mainly on how earnings per share relate with return on stocks among companies. Besides, findings also focus on how returns compare across different countries and regions. None of the studies, however, focuses on financial performance of the agricultural firms. This could be important in explaining the stability of such companies on the securities markets. It is with this in mind that the researcher postulates that

### **2.3.2 Dividend per Share and Financial Performance**

A plethora of literature exists showing patterns in dividend payment by companies. On the matter of deciding on dividend payments, Oza (2005) found out that current year' earnings,

patterns of past dividends availability of cash and expected future earnings are significant determinants of dividend payout. On the contrary capital expenditure requirements, bonus issue by the companies, and industry practices were found not to have a significant effect on decision regarding dividend payments. Firms in countries with better investor protection have been found to make higher dividend payout than do firms in countries in lower investor protection (la Porta, Lopez-de-Silanes, Shliefer&Vishny, 2000). Further it was also found out that in countries with more legal protection, high growth firms have lower payout ratios.

Dividend per share ratio has also been assessed in state-controlled firms. Gugler (2003) found out that state controlled firms are characterized by dividend smothering, very high payout and strong reluctance to cut dividends whereas family controlled firms are not subject to dividend smothering, have a low payout and are least reluctant to cut dividends.

A study by Bathla and Rao (2005) concluded that large firms were associated with higher dividend yields. This was after realization that firms with higher dividend yields led to lower costs of capital. The pattern of dividend payout was, therefore, found to be higher for financial and public utility companies as opposed to other types of companies. Other scholars found out that dividend payout pattern depend on investment decisions of the company (Brav, Graham, Harvey &Michaely, 2005). Consequently, dividend level should be deemed as a priority at par with the investment decisions and increase in dividend should only be considered after investment and liquidity needs have been met. These authors are of the view that sustainable increase in earnings and demand by institutional investors are the two root causes for non-payers to initiate dividend payment.

Dividend policy is further reported as a key determinant of dividend payout pattern. According to Baker, Mukherjee and Pakelian (2005), firms in general re-examine dividend policy annually and the firms mostly do not have explicit target payout ratio. The empirical evidence provided in the discussions show that indeed dividend patterns vary across firms. The decision to give dividends and the payout ratio is determined by a variety of factors from contextual to investment decisions.

### **2.3.3 Dividend Payout among Listed Firms**

Dividend payout decision remains crucial for all managers in all firms and could be an indicator of the success or failure. According to Amarjit et al (2010), there are several factors which managers should consider when making dividend policy decisions. Among these factors include financing limitations, investment chances and choices, firm size, pressure from shareholders and regulatory regimes. Dividend policy is postulated to be the pivot around which other financial policies oscillate (Alii et al, 1993). Indeed the centrality of the dividend policy is such that the Kenya Gazette Legal Notice No. 60 (2002) requires that among other requirements, companies should only be listed on the NSE if they have a clear future dividend policy. According to Ajanthan (2013), dividend decision as one of the four decision areas in finance determines funds that could be let to flow to investors and those that should be retained for future investment. The concern about dividend payout which, Fumey and Dokin (2013) refers to as the proportion of total profit paid out to ordinary shareholders as dividends, is that the decision made with regards to dividend payout can have financial consequences to the firm. In this regard, large dividend payout in any period could be construed to investment in subsequent periods. On the contrary, large investment outlay could lead to reduced funds for financial dividend payment.



On the basis of the bird in hand theory, there is a need for increased dividend. As noted by Amidu (2007), investors often prefer dividends to capital gains. This is because they view dividends as being less risky than capital gains. In order to maximize stock price, therefore, it is incumbent on a firm to set high dividend payout ratio and offer a high dividend yield. This, according to De Angelo et al (2006), would ensure wealth as opposed to using the funds for private benefits. Several studies have equally been conducted on the local context with regards to firms quoted at the NSE. Using a population of firms listed at the NSE, and with and of secondary data collected from the NSE and modified, Bitok (2004) established that on average the value of a firm depends on the dividend payout ratio. In yet another study focusing on the relationship between dividend payment and share prices of firms quoted at the NSE, Gitau (2011) found positively determined dividend payout ratio.

Market value of shares has been found to have an impact on dividend payout ratio. In a study to establish the effect of dividend policy on market value of shares of public companies listed at the NSE, Bunyasi market adjusted abnormal return improved on the day of dividend announcement as compared to values obtained 30 days prior to announcement of dividends. In a study to determine the effects of dividend policy on market share value in the banking industry, Mokaya et al (2013) established that dividend payout correlated strongly and positively with market share value. The findings enumerated above point to a host of factors that can influence payout ratio among firms. The plurality of these factors implies that firms can differ significantly in dividend decisions and hence dividend payout ratio.

## **2.4. Summary**

This chapter has explored literature related to dividend payout in as far as it is related to financial performance of firms. Profitability has been identified as the key pointer to the financial performance. Key ratios used in explaining profitability includes ROA, ROE, and ROS. Others like Tobin-Q have also been used. The review has however identified gaps that the study has attempted to address. First, most of the studies focus on dividend payout and performance without examining what exactly constitutes the dividend payout and which variables of dividend payout have a more telling effect on financial performance. Second, not much seems to have been conducted in connection to agricultural firms. Despite all these however no study seems to explore the effect of dividend per share on the financial performance of agricultural companies trading at the securities markets.

**CHAPTER THREE**  
**RESEARCH METHODOLOGY**

**3.1. Conceptual Framework**

Literature identifies various ratios that could use to measure dividend payout. These ratios include but are not limited to earnings per share, dividend yield, dividend per share, and dividend payout ratio. The study therefore conceptualizes that financial performance (measured in terms of profitability, firm growth and shareholder value) as a function of dividend payout (measured in terms of earnings per share, dividend yield, dividend per share and dividend payout ratio). Dividend payout is therefore the independent variable while financial performance is the dependent variable. (Figure 3.1)

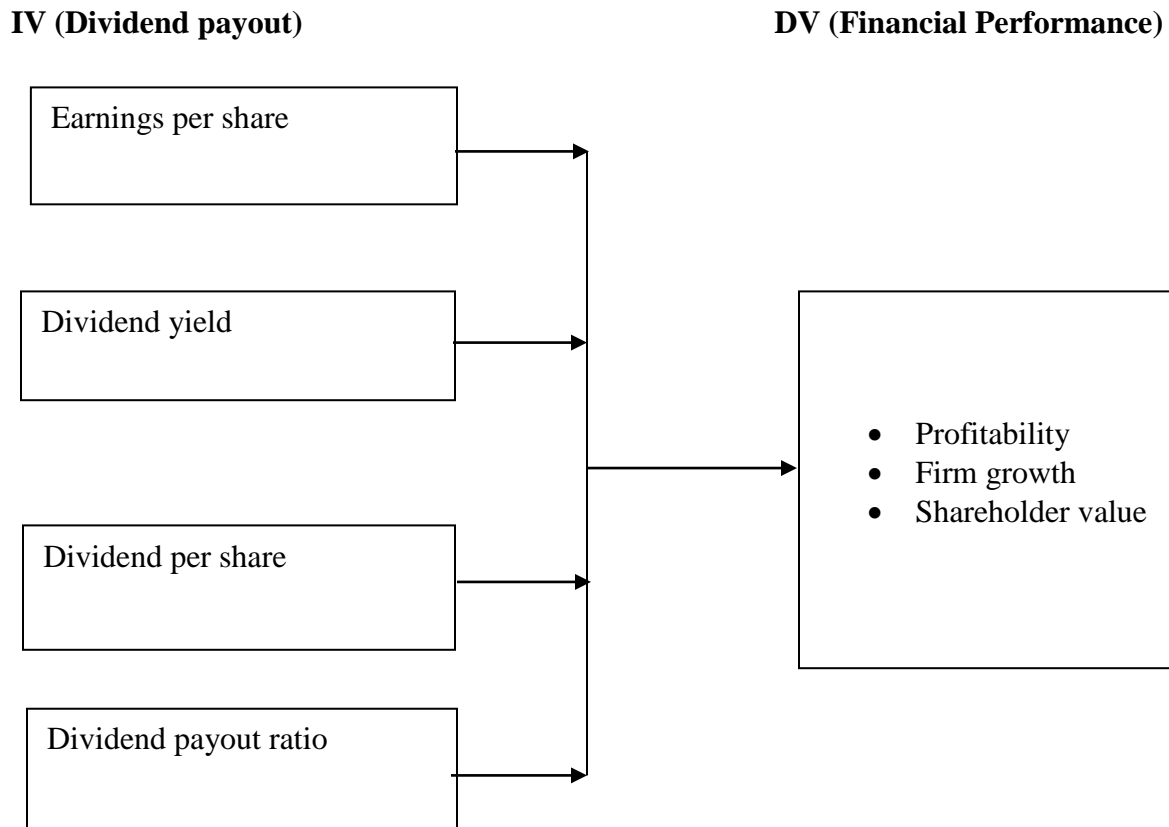


Figure 3.1: Conceptual framework

A review of the literature had identified four sets of variables that could have relationships when considering the effect of dividend payout policy on financial performance of Agricultural firms. The first set of variables identified was earnings per share and dividend yield. These variables were conceptualized to measure profitability, firm's growth and shareholders' value, the independent variable. Earnings per share (EPS) are the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability and is also a major component used to calculate the price-to-earnings valuation ratio.

$$\text{EPS} = \frac{\text{Net Income} - \text{Dividends on Preferred Shares}}{\text{Average Outstanding Shares}}$$

Dividend yield is a company's total annual dividend payments divided by its market capitalization, assuming the number of shares is constant and often expressed as a percentage. Dividend yield is used to calculate the earnings on investment considering only the returns in the form of total dividends declared by the company during the year.

$$\text{Dividend Yield} = \frac{\text{Dividend for the period}}{\text{Initial price for the period}} * 100$$

Dividend per share (DPS) is another variable which was used to measure the amount of the dividend that shareholders have or will receive for each share they own thus measuring the shareholders value. Companies may pay interim dividends during the year as well as a final dividend. These are added together to get the total annual amount in order to calculate DPS.

$$\text{DPS} = \frac{\text{Dividends paid}}{\text{Number of shares in issue}}$$

The dividend payout ratio is the amount of dividends paid to stockholders relative to the amount of total net income of a company. The amount that is not paid out in dividends to stockholders is held by the company for growth. The amount that is kept by the company is called retained earnings.

$$\text{Dividend Payout Ratio} = \frac{\text{Dividends}}{\text{Net Income}}$$

### 3.2 Research Design

The study examined effects of dividend payout policy in the context of Agricultural firms listed at NSE. The study therefore adopted the quantitative research design which is best suited for the deductive aim of the study. Quantitative methods emphasized objective measurements and the statistical, mathematical, or numerical analysis of data collected through journals, questionnaires, and existing statistical, using computational techniques. Quantitative research was based on gathering numerical data and generalizing it across groups of firms and this helped to explain effect of dividend of dividend payout on financial performance. The aim in conducting quantitative research study was to determine the relationship between an independent variable i.e. Earnings per share, Dividend yield, Dividend per share, Dividend payout ratio and another dependent variable i.e. Profitability, Firm's growth and Shareholder's value. Because quantitative research designs are descriptive, it established the associations between variables or being experimentally established causality before and after treatment. Quantitative method helped to recognize and isolated specific variables contained within the study framework, sought

correlation, relationships and causality, and attempted to control the environment in which the data was collected to avoid the risk of variables, other than the one being studied and accounting for the relationships identified.

Quantitative methods also used to allow for a broader study, involving a greater number of subjects, and enhancing the generalization of the results; allowed for greater objectivity and accuracy of results. Generally, quantitative methods were designed to provide summaries of data that support generalizations about the phenomenon under study. It helped summarize vast sources of information and make comparisons across categories and over time; and, a means of avoiding personal bias by keeping a 'distance' from participating subjects and using accepted computational techniques. Quantitative research focused on numeric and unchanging data and detailed, convergent reasoning rather than divergent reasoning. The overarching aim of a quantitative research study was to classify features, count them, and construct statistical models in an attempt to explain what was observed and thus it fits the study. More specifically, the study adopted the causal comparative design which as reported by Kothari (2009) seeks to establish cause effect relationship among variables. The design enabled effects of dividend payout ratio among agricultural firms to be identified while using naturally formed/ pre-existing groups.

### **3.3 Study Area**

The study was conducted on Agricultural firms listed at the Nairobi securities markets. The Stock market in Kenya is one of the most highly developed stock markets among the Eastern and Central African countries. However, comparing its growth by international standards it is still young and developing. There is one stock exchange in Kenya, known as the Nairobi Securities

exchange (NSE), formerly known as the Nairobi Stock Exchange, where the trade in stocks and shares, among other capital market instruments, takes place. The NSE was established in 1954, with 46 listed companies.

### **3.4 Target Population for the Study**

The study targeted agricultural firms listed on the NSE as at 2013. Agricultural firms were being considered in the proposed study since there is a problem of persistent minimal listing of agricultural firms with the number currently standing at 7 (NSE, 2012). The study was therefore confined to a probability space of the seven agricultural firms. The seven firms listed on the NSE under the agricultural segments and which comprised of ; Eaagards Ltd; Kakuzi Ltd; Kapchorua Tea Company Ltd; Limuru Tea Company Ltd; Rea Vipingo Plantations Ltd; and Wilhamson Tea Kenya Ltd. Data for the study was collected to cover a five year period starting from 2008 to 2012 inclusive. Since the target population size of seven agricultural firms is small enough, a census of the firms was conducted. Consequently, all the seven agricultural firms were used in the study.

### **3.5 Data Sources and Instrumentation**

#### **3.5.1 Data Sources**

The study employed secondary sources that would be obtained from the firm's annual reports most of which are publicly available and can also be accessed from the NSE handbook. This was for a five year period, that is, from the year 2008 to 2012. The data mainly comprised the financial statements. The data collection involved quantitative data from listed companies' financial statements and Nairobi Securities Exchange journals for the years the five years and

validated for accuracy, completeness and reliability. A sample on 7 listed companies were analyzed.

### **3.5.1 Instrumentation**

An in depth management interview schedule was used to investigate the managers perception of financial performance of the firms under study. This comprised of two section; section 1 structured and sought to establish factors that management consider dear in analyzing dividend payout in terms of expected future/past earnings, investors behavior in regards to dividend payout and how forms of dividends may impact shares prices. Section 2 contained open ended items that sought incisive views from the management with regards to firm's dividend payout policy, how the variables effect growth and shareholders' value and the sustainability of the dividend payout policy considering other factor like the firm level of growth.

## **3.6 Validity and Reliability of the Data Collection Instrument**

### **3.6.1 Validity**

Validity is defined as the extent to which an instrument measures what is set out to measure (Sekaran&Bongie, 2010). Two types of validity were focused on;First, content validity which measures the adequacy of the instrument tested by use of expert researchers and supervisors.

They ascertained; the extent to which the indicators sufficiently address the problem area based on theoretical and practical considerations. Validity was achieved by having objective data and pre-testing a sample of the information used.



### 3.6.2 Reliability

Considering that the data was mainly is secondary, the three steps suggested by Saunders et al (2007), for evaluating secondary data was undertaken. First, the overall suitability of the data in meeting the desired research objectives was assessed. Second, the data was examined to see whether it generated the measures required in the study. Third, the credibility of the source in terms of how the data was collected and compiled, and the checks for validity and reliability available, was assessed.

### 3.7. Data Analysis

The Statistical Package for Social Sciences (SPSS version 18) was used to for data analysis. First data was screened and cleaned of errors. Time series analysis trend over the five year period was conducted to ascertain the trends in earnings per share, dividend yield, dividend per share and dividend payout ratio of agricultural firms listed at the NSE. Multiple regression analysis was conducted to establish whether earnings per share, dividend yield, dividend per share and dividend payout ratio affected the profitability hence financial performance.

The empirical model for payout ratio is follows.

$$Y_{it} = \alpha_0 + \alpha_1 \text{earnings}_{it} + \alpha_2 \text{div. yield}_{it} + \alpha_3 \text{div/share}_{it} + \epsilon_{it}$$

where

$$i = 1, 2, 3, 4, 5, 6, 7$$

$$t = 1, 2, 3, 4, 5$$

$i$  – denotes the  $i^{\text{th}}$  firm and  $t$  – denotes the  $t^{\text{th}}$  year (time series dimension)

$Y_{it}$  – is the dividend payout for firm  $i$  at time  $t$

Earnings – is the earnings per share ratio

Div-yield – is the dividend yield

Div/share – is the dividend per share

$\varepsilon_{it}$  - represents the stochastic error term, with two dimensions, one for the firm (i) and the other for the time (t).

One Way Analysis of Variance (ANOVA) was used to compare earnings per share, dividend yield, dividend per share and dividend payout ratio among the listed agricultural firms.

Besides, the Bonferroni Post Hoc tests were used to verify periods of major differences in the reported financial ratios among the firms.

### **3.8 Ethical Considerations**

The researcher complied with the relevant ethical principles that are relevant in research. First, the researcher sought informed consent from the NSE to conduct research on the listed firms. Second, information collected from the firms was treated with utmost confidentiality. As a first step, the agricultural firms in question were not be identified by name instead coded from 1 to 7.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS**

#### **4.1 Introduction**

This chapter presents the results and findings of the study based on the research objectives presented in the form of summary tables. In addition a regression analysis is used to analyze the data to answer the research objective and to establish the strength of the relationship between the variables under consideration, correlation analysis was performed.

#### **4.2 Descriptive Statistics**

Data were first explored in order to ascertain key considerations that could limit generalization of study findings. Descriptive statistics were therefore used to examine the appropriateness of distribution of data within respective variables. Consequently data were explored for normality, univariate outliers, and variability among other key requirements. Results of the descriptive analysis are displayed in Table 4.1.

**Table 4.1 Descriptive statistics for the study variables**

	Earnings per share (Ksh 000)	Dividend yield (%)	Dividend per share (Ksh 000)	Dividend payout ratio (%)	Liabilities (Ksh 000, 000)	Assets (Ksh 000,000)	Net Profit (Ksh 000, 000)
Mean	19.95	4.250	3.64	15.91	313.0	2669.0	239.2
SE Mean	4.99	0.425	0.59	3.91	44.9	464.1	55.5
Maximum	100.1	9.560	12.5	92.17	1017.2	8878.6	993.7
Minimum	-17.8	0.000	0.000	-26.74	4.53	47.5	-409.3
Std. Dev.	28.6	2.480	3.45	22.49	262.0	2.7	323.6
Skewness	1.71	0.23	0.76	1.51	0.81	1.15	0.80
Kurtosis	2.48	-0.72	-0.49	3.90	0.71	0.15	0.29
JarqueBera	1.026	1.161	3.500	2.200	3.678	3.821	3.293
Probability	0.512	0.558	0.174	0.312	0.159	0.303	0.193

Source: Survey Data (2016)

The mean of all the variables were positive. The variables were not very highly spread from the respective means as seen from the small standard errors. The highest dispersion was reported on assets held (Ksh 464.1 M). All the variables had minimal positive skews reflecting a concentration on the left side with a tail on the right. The highest peaked distributions are evident for earnings per share (2.48) and dividend payout ratio (3.90). The Jarque–Bera statistics for all the variables were non-significant. This is an indication that the distributions across the variables are normal.

From the correlation statistics presented in Table 4.2, profitability is positively correlated with earnings per share, dividend yield, dividend per share, and dividend payout ratio. Similarly, leverage is also found to correlate positively with the four measures of dividend payout. These results are consistent with findings of several studies which show that dividend payout is a crucial factor affecting firm performance (Ajanthan, 2013). Indeed these findings portray a strong and positive correlation between dividend payout and firm performance. Essentially, the implication is that dividend policy in consequence, enhances firm profitability and, therefore, shareholder value.

Results further indicated positive and significant correlations among the dividend payout measures. This is indicative of the interplay among these variables. When earnings per share for instance go up, a direct effect is triggered in dividend yield, dividend per share, and dividend payout ratio.

**Table 4.2: Results of Correlation between Variables**

	Dividend					
	Earnings per share	Dividend yield	Dividend per share	payout ratio	leverage	Profitability
Earnings per share	1					
Dividend yield	.626**	1				
Dividend per share	.636**	.148	1			
Dividend payout ratio	.728**	.536**	.568**	1		

Leverage	.704**	.327*	.564**	.530**	1
Profitability	.742**	.714**	.681**	.712**	.559**

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

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

Source: Survey data (2016)

### 4.3 Existing Trend in Dividend Payout among Agricultural Firms listed at NSE

Research objective one sought to establish the effect of dividend payout among agricultural firms listed at the NSE. Dividend payout was considered to be the independent variable in this study. Consequently, the existing trend in dividend payout were measured by examining trends in the four variables measuring dividend payout. These variables were earning per share, dividend yield, dividend per share, and dividend payout ratio.

#### 4.3.1 Existing Trend in Earning Per Share

Analysis of the existing trend in earnings per share over the five year period of study revealed results reported in figure 4.1.

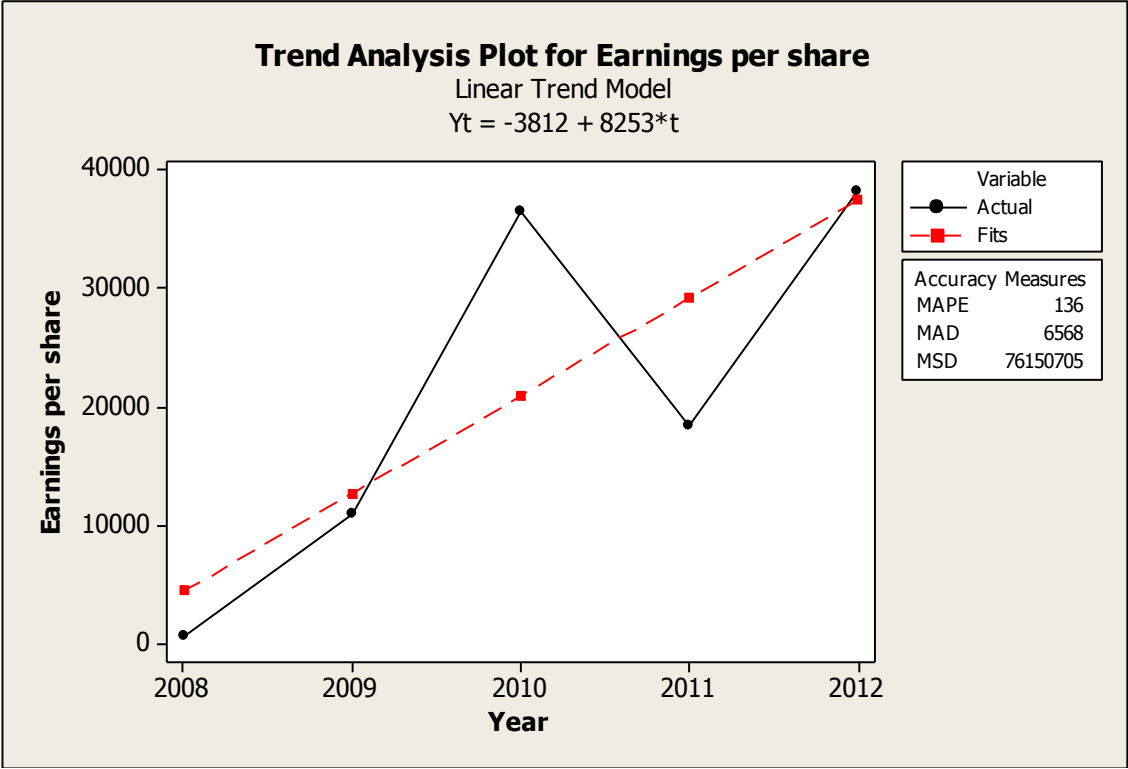


Fig 4.1: Trend in Earnings per Share

Results show that there was a peak in earnings per share in the year 2010 and a trough in the year 2011. Consequently, earnings per share increased steadily between 2008 and 2009. This then increased sharply in 2010 to approximately Kshs. 37,000 before falling to close to Kshs. 20,000 in 2011. Earnings per share rose again sharply in 2012 to stand at approximately Kshs. 38,000. Earnings per share were therefore observed to have been fluctuating during the five year period, reaching a high of Kshs. 38,000. The fitted trend line shows a gradual increase in earnings per share over this interval whose equation was estimated to be  $Y_t = -3812 + 8253t$ .

**4.3.2 Existing Trend in Dividend Yield**

The Actual five year series chart for dividend yield shows two peaks and two troughs that suggest a moderate increase in dividend yield (figure 4.2).

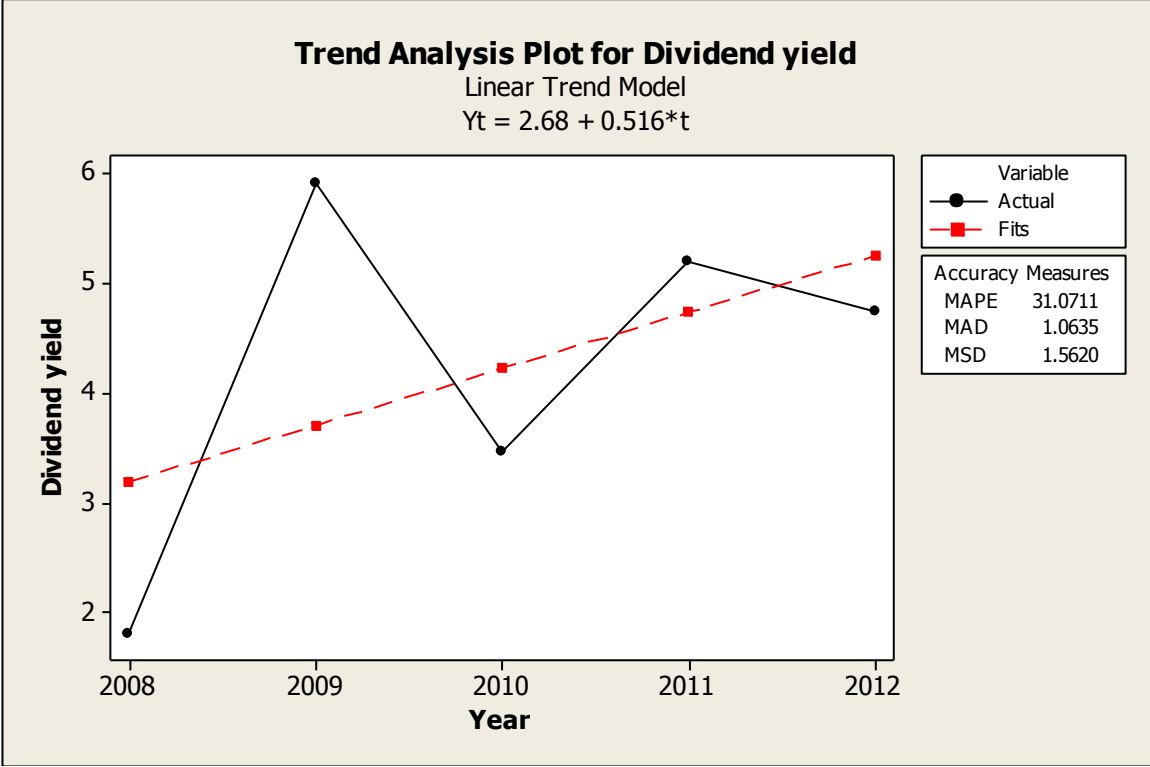


Fig 4.2

The highest dividend yield within the five year period was approximately 5.9 percent realized in the year 2009. The least dividend yield within the same interval was roughly 1.5% recorded in the initial year (2008). The long term trend revealed an increasing trend in dividend yield in the stated period. The linear model was estimated as

$Y_t = 2.68 + 0.516t$ . The implication of these results is that with increasing trend in earnings per share, dividend yield equally gains leaving a long term trend that also increases.

**4.3.3 Existing Trend in Dividend per share**

The trend analysis for dividend per share presented in figure 4.3 revealed a progressive increase in dividend per share between the years 2008 to 2011. This was possibly orchestrated by the



subsequent increase in earnings per share and dividend yield. There was however a decline in dividend per share from approximately Kshs. 4800 in 2011 to roughly Kshs. 4,200 in 2012. The long term underlying pattern in dividend per share shown by the fitted trend line indicates that dividend per share had an overall increasing trend in the five year period with the linear model represented as  $Y_t = 1821 + 610t$ .

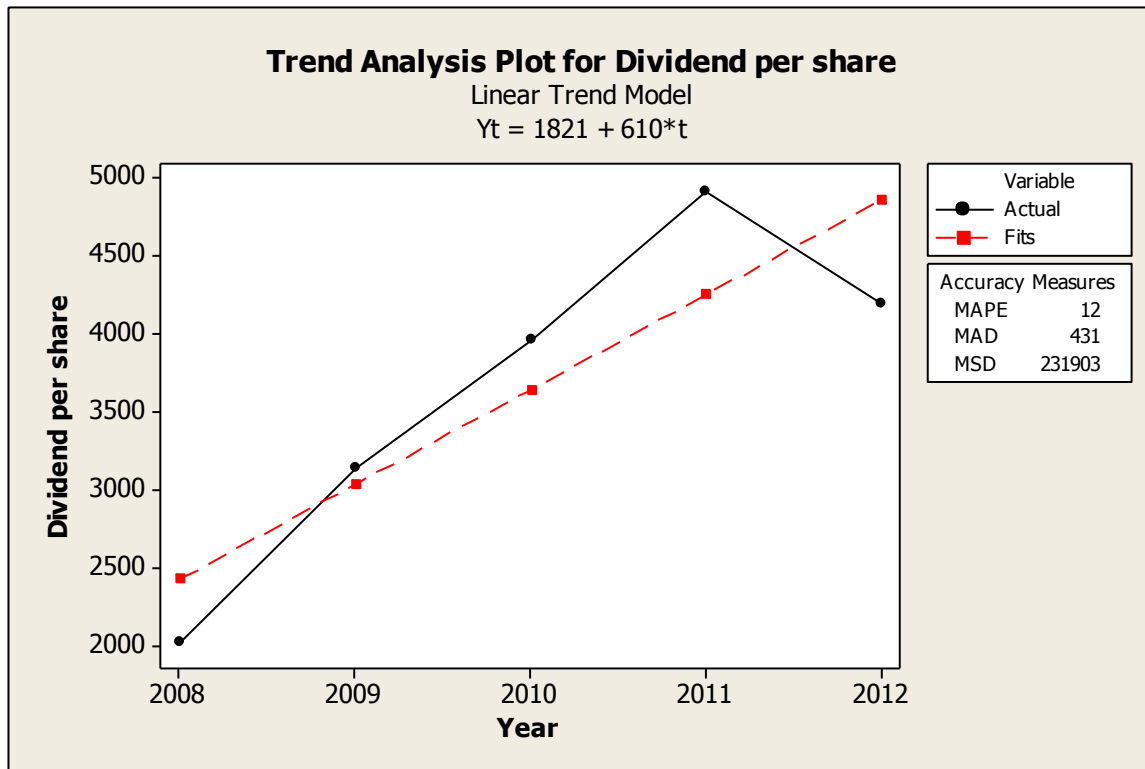


Fig 4.3

#### 4.4 Existing trend in Dividend payout Ratio

Analysis of the trend in dividend payout ratio revealed a more fluctuating picture than the other variables. As shown in fig 4.4, dividend payout ratio increased to approximately 25% from 2008

to 2009. It then dropped to roughly 12% in 2010 and to a further approximately 2% in 2011. The ratio then rose sharply to a high of almost 27% between 2011 and 2012. Despite these fluctuations, the long term underlying trend in dividend ratio within the stated interval revealed a gradually increasing trend represented by the linear function  $Y_t = 10.2 + 1.96t$ .

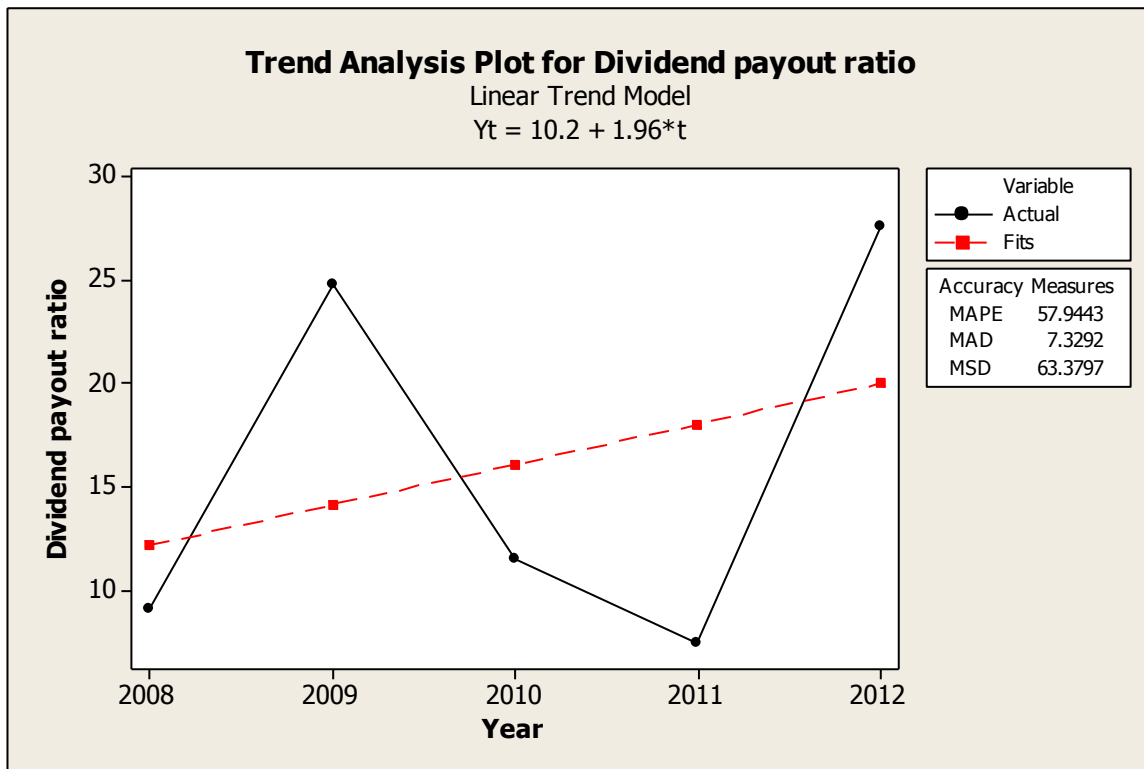


Fig 4.4

#### 4.4.1 Summary

Results of the trend analysis of the dividend payout variables among the agricultural firms listed at the NSE indicate that despite observed fluctuations in individual variables, the long term patterns reveal an increasing trend in all the four variables implying an increasing trend in dividend payout of the firms for the period 2008 to 2011.

The increasing trend in the variables observed is an indicator of increasing value among the firms. It is imperative to note that the increase in dividend payout ratio trend is a consequence of increase in dividend per share as well as dividend yield. This is consistent with findings by De Angelo et al (2000b) that a high dividend payout ratio, would result in a high dividend yield.

Besides, results showing an increase in firm's value are consistent with findings of several studies conducted on the local context. According to Bitok (2004), average value of a firm is a function of dividend payout ratio. This mirrors the current study findings which show an increase in dividend payout ratio and hence the envisaged firm value. Similar findings are reported by Gitau (2011) when contending that dividend payments and share prices positively determine dividend payout ratio.

#### **4.5 Existing Trend in the Performance of Agricultural Firms listed on the NSE.**

The second objective of this study focused on establishing effect of dividend yield on financial performance of the agricultural firms listed at the Nairobi Securities Exchange market. Performance of agricultural firms was measured by examining the trend in leverage measured in terms of liabilities and Assets as well as examining the trend in profitability measured in terms of net profits.

##### **4.5.1 Existing Trend in Firm's Growth by Agricultural Firm's listed at the NSE.**

This was analyzed in terms of assets growth of various firms. The trend analysis of Assets held by the agricultural firms portrayed increasing value of the firms under study. There was a sharp

rise in the long term trend from a low of Kshs. 2000 million in 2008 to a high of 13,300 million in 2012.

The Actual trend shown in figure 4.6 indicates that there was a very minimal increment in assets between 2008 and 2009. The assets however increased drastically between 2009 and 2010 moving from Kshs. 200m to close to 3050 million in 2010. This figure was almost maintained in the period 2010 to 2011 but increased to Kshs. 3,200 million in 2012.

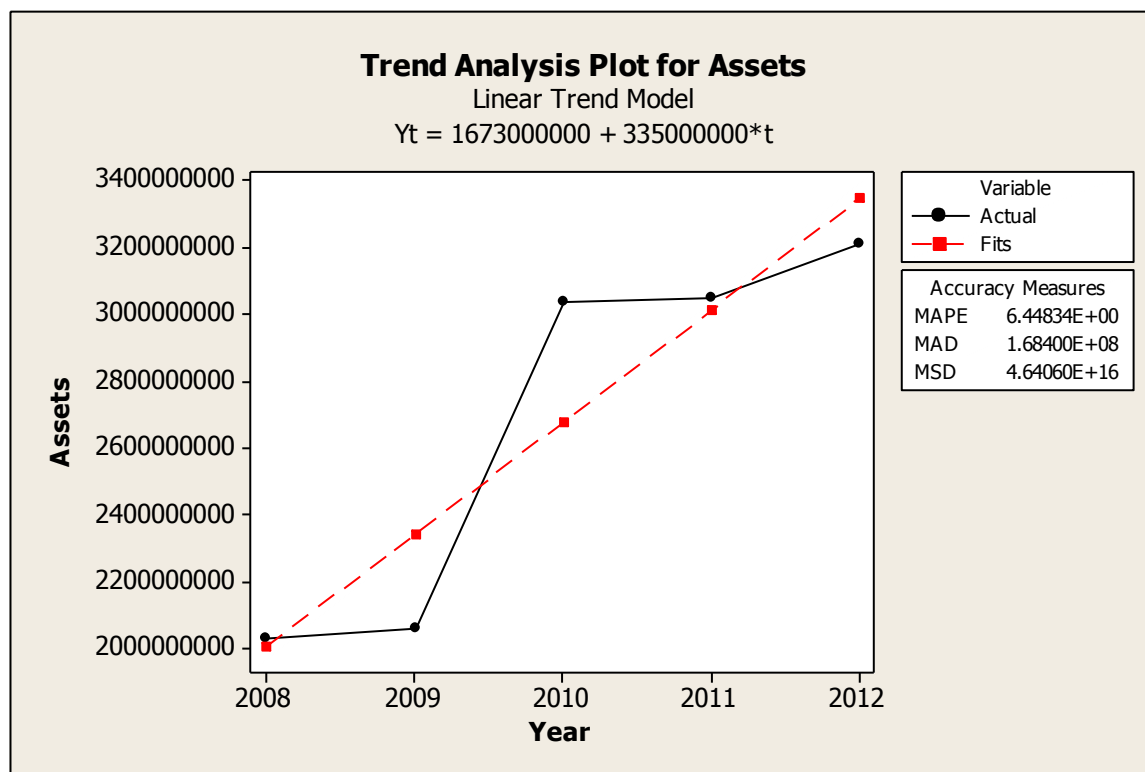


Fig 4.5

The implication of these results is that agricultural firms listed at the NSE achieved growth in the stated period. Firm assets increased within the period and although liabilities also reportedly

increased, the trend with which they increased was much lower than the trend in increment of assets.

#### 4.5.2 Existing Trend in Profitability among Agricultural Firms listed at the NSE

Trend analysis in profitability among agricultural firms listed at the NSE was conducted and revealed results presented in figure 4.7.

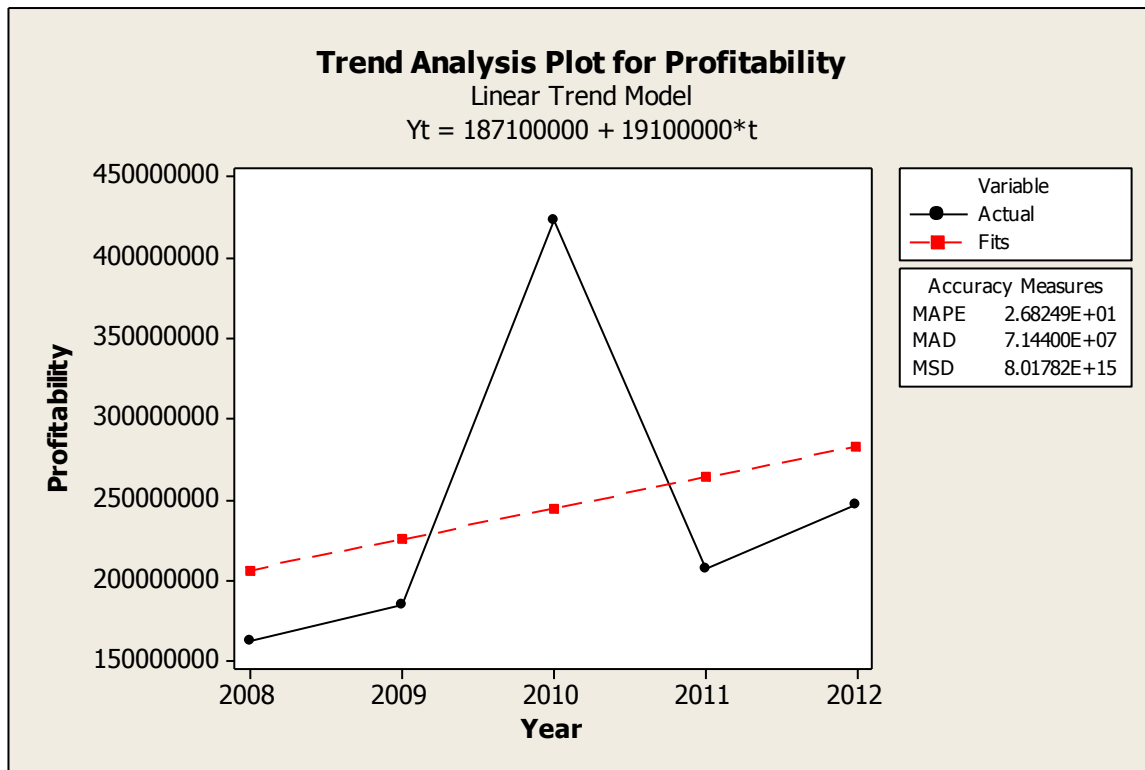


Figure 4.6

The trend analysis plot for profitability depicts a moderate increase in actual profitability from approximately Kshs. 160 million in 2008 to roughly 170 million in 2009. This was however

followed with a massive increase from approximately Kshs. 170 million in 2009 to almost 430 million in 2010. A major drop to Kshs. 200 million was then experienced in 2011 followed with a small increase in profitability to approximately 250 million in 2012. The overall long term pattern in profitability indicates a moderately increasing trend (slope of Kshs. 19.1 million) within the five year interval. The estimated linear trend model was  $Y_t = 187.1 + 19.1 t$  (in millions of shillings).

The findings indicate that trends observed in dividend payout variables have an impact on firms performance measured in terms of leverage and profitability. The firm's dividend payout was on the rise within the period of interest and so was performance. This is consistent with findings by Amidu (2007) that dividend policy affects firm performance especially the profitability measured by the return on assets. Other findings (Murekefu and Ouma, 2012) have also shown that dividend payout affects firm performance strongly and positively.

The trend patterns showing increment in profitability over the five year period therefore portend well for the agricultural firms in question. This is basing on findings by Murekefu and Ouma (2012) that profitability as well as financial leverage is key factors that affect dividend policy of firms. The findings showing increasing trends in dividend payout indicators leading to increasing trends in profitability and leverage further adds to existing discourse that seemed not to find an acceptable explanation for observed behavior in dividends (Samuel and Edward, 2011). Consequently, it is safe to argue that whichever way one views patterns in dividend payout, the ultimate picture is that of an overall increasing trends in dividend payout leading to increasing trends in firm performance and vice versa.

## **4.6 Modeling Performance of Agricultural Firms listed at the Nairobi Securities Exchange Market**

Research objective three of the current study sought to determine the effect of dividend payout on the performance of agricultural firms listed at the NSE. Both profitability and leverage were therefore regressed on the four indicators of dividend payout. The relationship of firm performance and the four dividend payout indicators was conceptualized to be of the form.

$$\text{Firm performance} = \beta_0 + \beta_1 (\text{earnings per share}) + \beta_2(\text{dividend yield}) + \beta_3(\text{dividend per share}) + \beta_4(\text{dividend payout ratio}) + \varepsilon$$

Since multiple regression analysis was used to test the effect of dividend payout indicators on performance of agricultural firms, it was necessary to first validate assumptions of multiple regression in the case of time series data. Consequently, the Durbin-Watson test was run to check for auto correlation, Dickey Fuller tests were used to examine non-stationarity and co-integration, variance inflation factors for Multicollinearity and chi-square for heteroskedasticity.

### **4.6.1 Testing for Autocorrelation**

The Durbin–Watson Statistics were used to test for the presence of autocorrelation. Consequently, for each regressor, the null hypothesis that there was no autocorrelation was tested. At the 5% level of significance, the critical values for the Durbin–Watson statistic corresponding to  $n=15$  (since the series involved 5 years) and four regressors was set at  $d_l = 0.69$  and  $d_u = 1.97$ . Consequently, values below  $d_l$  implied positive autocorrelation, values within the

interval  $0.69 < \text{value} < 1.97$  implied inconclusive test, while values beyond  $d_u$  implied existence of autocorrelation.

Each variable was regressed against firm performance in order to determine the Durbin–Watson statistic. Table 4.8 reveals that there was no autocorrelation in earnings per share and dividend per share. However, tests for dividend per share and dividend payout ratio remained inconclusive on autocorrelation.

Table 4.8

<b>Variable</b>	<b>Durbin-Watson statistic</b>	<b>Conclusion</b>
Earnings per share	2.471	No autocorrelation
Dividend yield	0.778	Test inconclusive
Dividend per share	2.533	No autocorrelation
Dividend payout ratio	1.280	Test inconclusive

Source: Survey data (2016)

Despite the inconclusive tests, dividend yield and dividend payout ratio were however, used as repressors' though this was noted to be a potential limitation of the study.

#### **4.6.2 Testing for Non-Stationarity**

The need to test for non-stationarity of the time series was informed by the urge to ensure that among others, regressions were not spurious ( a high  $R^2$  was only a result of relationship between variables and not otherwise); and that the usual t-ratios do follow a t-distribution allowing for a valid undertaking of hypothesis tests about the regression parameters.



Formal investigation for non-stationarity was therefore conducted using the Augmented Dickey Fuller (ADF) test. Under the test, it was assumed that the existed unit root in the series. On performing the test, test statistics were compared to critical values. In case the ADF statistic exceeded the critical value, the assumption of unit root in the series was applied at level as well as at the first difference.

Table 4.9

<b>Variable</b>	<b>ADF Test</b>	<b>Test Statistic</b>	<b>1% value</b>	<b>Critical 5% value</b>	<b>Critical</b>
Earnings per share	At Levels	-1.26028	-3.546099	-2.911730	
	First Difference	-10.4747	-3.548208	-2.912631	
Dividend yield in %	At Levels	-0.687092	-3.546099	-2.911730	
	First Difference	-12.5876	-3.548208	-2.912631	
Dividend per share	At Levels	-0.905523	-3.546099	-2.911730	
	First Difference	-6.10729	-3.548208	-2.912631	
Dividend payout ratio	At Levels	-2.18511	-3.546099	-2.911730	
	First Difference	-10.1868	-3.548208	-2.912631	
Liabilities	At Levels	-0.06359	-3.546099	-2.911730	
	First Difference	-8.1517	-3.548208	-2.912631	
Assets	At Levels	-0.96345	-3.546099	-2.911730	
	First Difference	-4.24252	-3.548208	-2.912631	
Profitability	At Levels	-1.61079	-3.546099	-2.911730	
	First Difference	-9.75373	-3.548208	-2.912631	

Source: Survey data (2016)

From table 4.9, ADF statistics indicated that all indicators of dividend payout under consideration contained unit root when measured at level (ADF statistics were within the acceptable region). This implies that these indicators were non-stationary at level. They however, became stationary after the first difference.

#### 4.6.3 Testing for Multi-collinearity

Multicollinearity was examined by regressing each of the independent variables against all other independent variables. Multicollinearity (or intercorrelation) exists when at least some of the predictor variables are correlated among themselves (Tabachnick&Fidell, 2013). In this case, there was need to examine whether or not the dividend payout indicators were correlated among themselves and how this affected the subsequent multiple correlation.

Table 4.10 presents the R-squared statistic and the variance inflation factor (VIF) for each equation.

**Table 4.10: Multi-collinearity Results for the Independent Variables**

Variable	Auxiliary R <sup>2</sup>	VIF
Earnings per share	0.714	1.135
Dividend yield	0.756	1.333
Dividend per share	0.248	1.191
Dividend payout ratio	0.678	1.267

Source: Survey data (2016)

Based on the very small values of VIF for all the variables, and basing on recommendations by Greene (2002), the data was adjudged to have no issues of multi-collinearity.

#### 4.6.4 Testing for Heteroskedasticity

Data was also checked for constant variance in the error term. The null hypothesis for this test for each variable was that the variance was constant. A significant heteroscedasticity chi-square value would then indicate evidence of heteroscedasticity. Results are presented in Table 4.11.

**Table 4.11: Results of the Heteroskedasticity Test**

Variable	Chi2(1)	Prob>Chi2
Earnings per share	0.07	0.7910
Dividend yield	0.01	0.9151
Dividend per share	13.71	0.0002
Dividend payout ratio	0.81	0.3691
Leverage	0.11	0.7438
Profitability	0.23	0.6330

Source: Survey data (2016)

Results presented in Table 4.11 reveal that the chi2 (1) statistics for earnings per share, dividend yield, dividend payout ratio, leverage and profitability were not significant. This implies that

these variables had no heteroskedasticity. The chi2 (1) statistic for dividend per share was found to be significant indicating presence of heteroskedasticity. Once again, the variable was used under this limitation.

#### 4.6.5 Results of Regression Equation

To establish the relationship between performances of the agricultural firms listed at the Nairobi Securities Exchange market and dividend payout, multiple regression analysis was conducted. Unit root investigation indicated that the variables used in the study contained unit root at level and were integrated of order 1. The variables were also found to have no major issues of autocorrelation, multicollinearity and heteroskedasticity. Regression was therefore run at level. Table 4.12 presents results of the regression equation in which first leverage was regressed on the four dividend payout variables followed by profitability regressed on the same variables.

**Table 4.12: Regression Parameters**

Predictors	leverage			Profitability		
	B	t	VIF	B	t	VIF
(const.)	13.964**			7210**	3.14	
Earnings per share	.0457**	2.985	2.072	-115.45**	-7.92	2.072
Dividend yield	-.0354**	-3.244	2.340	48.26**	4.45	2.340
Dividend per share	.0139*	2.613	1.590	-9.910	-1.43	1.590
Dividend payout ratio	-.00004	.268	1.187	5.798*	2.06	1.187
	R-sq=0.779			R-sq=0.911		

	R-sq (adj)=0.749	R-sq (adj)=0.900
Durbin-Watson	1.932	2.194

Source: Survey data (2016)

Table 4.12 indicates that Earnings per share ( $B = 0.0457$ ,  $p < 0.01$ ), dividend yield ( $B = -0.0354$ ,  $p < 0.01$ ) and dividend per share ( $B = 0.0139$ ,  $p < 0.05$ ) were significant predictors of leverage. However, dividend payout ratio ( $B = -0.00004$ ,  $p > 0.05$ ) was not a significant predictor of leverage.

The regression equation was therefore estimated as

$$\text{Leverage} = 14.0 + 0.0457 \text{ Earnings per share} - 0.0354 \text{ Dividend yield} + 0.0139 \text{ Dividend per share} - 0.00004 \text{ Dividend payout ratio}$$

Besides, the value of  $R^2$  indicates the prediction power of the adhoc model. Consequently, 77.9% variation in leverage was explained by the set of dividend payout variables used.

With regards to dividend payout and profitability, Table 4.12 reveals that earnings per share ( $B = -115.45$ ,  $p < 0.01$ ); dividend yield ( $B = 48.26$ ,  $p < 0.01$ ); and Dividend payout ratio ( $B = 5.798$ ,  $p < 0.05$ ) were significant predictors of profitability. Dividend per share was however found not to be significant. Regressing profitability on dividend payout therefore yielded the following regression equation

$$\text{Profitability} = 7210 - 115 \text{ Earnings per share} + 48.3 \text{ Dividend yield} - 9.91 \text{ Dividend per share} + 5.80 \text{ Dividend payout ratio}$$

## **4.7 Management Perspective of Factors that Determine Dividend Payout among Agricultural Firms' Listed at the NSE**

Primary data was used to examine perspectives of the management of agricultural firms with regards to factors that determine the firm's dividend payout. Consequently, the management questionnaire comprised of two sections. The first section consisted of structured questions focusing on suggested factors drawn from past experience. This section was therefore quantitatively by examining descriptive statistics. The second section consisted of unstructured questions that sought management's incisive views on dividend payout and firm performance. This section was analyzed qualitatively by seeking out key themes reflecting among the management team.

### **4.7.1 Descriptive Analysis of Managements Views**

A total of eleven structured items were used to explore management's views on factors that determine dividend payout among the firms. Respondents were asked indicate the importance of each of the suggested factors in determining dividend payout in their respective firms. Responses were elicited on a five point scale comprising of: 0-of no importance; 1-of slight importance; 2-of moderate importance; 3-of great importance; and 4-of maximum importance. On the basis of results presented in Table 4.13, availability of cash; desire to conform to industry dividend practice; bond indenture provisions; concern about making a target capital structure; and anticipated level of firm's future earnings were deemed by management of the agricultural firms as being of maximum importance in regards with dividend payout among the firms.

Concern that changes in dividends may trigger false signals to investors; preference for dividends rather than risky investment; pattern of past dividends; and cost of raising external funds were deemed to be of great importance in determining dividend payout. On the contrary, legal listing and characteristics and requirements of the shareholder were rated as having moderate importance in determination of dividend payout.

**Table 4.13: Management Rating of Factors Determining Dividend Payout among Agricultural Firms Trading at the NSE**

	Of moderate importance		Of great importance		Of maximum importance	
	No.	%	No.	%	No.	%
	Anticipated level of firm's future earnings	0	.0	5	35.7	9
Pattern of past dividends	0	.0	8	57.1	6	42.9
Availability of cash	0	.0	0	.0	14	100.0
Concern that changes in dividends may trigger false signals to investors	3	21.4	11	78.6	0	.0
Characteristics and requirements of the shareholder	3	21.4	6	42.9	5	35.7
Legal listing	6	42.9	3	21.4	5	35.7

preference for dividends rather than risky5	35.7	9	64.3	0	.0	
investment						
Desire to conform to industry dividend0	.0	0	.0	14	100.0	
practice						
Bond indenture provisions	0	.0	3	21.4	11	78.6
Cost of raising external funds	6	42.9	8	57.1	0	.0
Concern about making a target capital0	.0	5	35.7	9	64.3	
structure						

---

Source: Survey data (2016)

The implications of these findings is that despite dividend payout relying on profitability and leverage both, of which, are functions of key financial indices such as earnings per share, dividend per share, and dividend payout ratio other contextual factors greatly influence determination of dividend payout. Of maximum importance in this category is the ability of the firm to have cash available and also the desire to remain within the requirements of the agricultural industry by conforming to desired practice. Nonetheless, bond indenture provisions and anticipated level of firm's future earnings are noted as also being crucial to determination of dividend payout.

#### **4.7.2: Thematic analysis of Managers Unstructured Questionnaire Items**

A total of six questionnaire items were used to probe the management of agricultural firms listed at the NSE with regards to utility of dividend payout I their respective firms. Responses were examined for prominent, recurrent themes across and within respondents using thematic analysis.



Thematic analysis was conducted with the goal of processing data inductively rather than deductively as suggested by Seidman (1998). As shown in Table 4.14, several themes emerged related to use of dividend payout in agricultural firms.

**Table 4.14: Results of Thematic Analysis of Management Responses**

Question	Theme	Commentary
How relevant are earnings and yield considerations when assessing dividend payout?	Very relevant (100%)	Earnings determine how much dividend is declared (dividend payout).
What exactly are their contributions?	Dividend declaration	Yield is used to calculate the earnings on shares (how much a shareholder takes home in terms of dividends),
Please describe the need of sustainability of constant dividends with regards to dividend payout.	Competitive advantage	Allows for the introduction of a new product, a new technology, or an innovative marketing strategy. Improves chances of handling competition
	Long term growth	Eliminates the idea of non-constant dividends supernormal, or erratic growth stocks. This allows for long term growth
How does the need for cash and growth impact on dividend payout in your firm?	Financial policies	We consider whether to issue cash dividends in the present or paying an increased dividend at a later stage. Retained earnings allow for growth of the firm
	Long-term Earning	Sustains long term earning power that will oversee decisions on whether or not to issue dividends and

	power	the amounts
	Form of Dividend	Enables decisions on: Form of dividend Whether tax should be levied on dividends Retention of earnings or stock buy-back
Does the firm adhere to political, regulatory, and banking considerations?	Yes	Firm adheres to corporate governance Ensures social responsibility
Dividends are designed to reward shareholders for their loyalty. How likely it is that dividend payout in your firm is a gimmick to show obligation to shareholders in meeting objectives?	Not likely	Dividend payout in the firm is taken seriously owing to its potential on value addition and wealth maximization Due to challenges and economic changes affecting the firm's growth ,the firm dividend policy may not completely be aligned to industry practice

Source: Survey Data (2016)

On the question of how relevant earnings and yield considerations are when, assessing dividend payout, all the participated managers intimated that they were very relevant. When probed further one theme emerged relating to dividend declaration. It was revealed that earnings being total profits available for distribution, determine how much dividend is declared. On the other hand, yield as ratio of dividend payment to market capitalization determines earnings on shares.

When asked to describe the need for sustainability of constant dividends with regards to dividend payout, two themes emerged.

First, it emerged that sustainability of constant dividends is a strategy to attain competitive advantage. Respondents noted that many firms enjoy periods of rapid growth as a result of introduction of new technologies and innovative marketing strategies which mainly succeed when the firms continue to share profits with shareholders through sustenance of constant dividends. This allows them to ward off competition.

Second, it emerged that sustaining constant dividends eliminates the idea of non-constant dividends, supernormal or erratic growth stocks thereby allowing for long-term growth. Besides, it allows for the valuation of firms on the assumption that dividends will grow at a constant rate.

On the question of how the need for cash and growth impact on dividend payout in firms, three themes emerged. First, it was noted that the need for cash enables crafting of financial policies. Such policies are used in decisions as to issue or not to issue dividends but retain the earnings for growth of the firm. Second, the need for cash was associated with long term earning power of the firm.

Third, it was revealed that the need for cash enables decisions on the firm of dividends to issue, whether they ought to be taxed or whether to retain earnings or perform a stock buyback.

When asked whether the firm adheres to political, regulatory and banking considerations, respondents agreed noting that firms adhere to corporate governance and social responsibility and these bind them to the required political, regulatory and banking considerations. When probed on how likely that dividend payout in these firms were a gimmick to show obligation to

shareholders in meeting objectives, respondents largely indicated it was not likely. They reported that dividend payout in the firms is taken seriously owing to its potential on value addition and wealth maximization. They however, observed that challenges and economic changes affecting the firms often lead to firm's dividend policies that may not be completely aligned to industry practice.

#### **4.8 Discussions of findings**

This section provides a discussion of the study findings in line with the objectives of the study and existing literature focusing on dividend payout and organizational performance.

##### **4.8.1 Existing Trend in Dividend Payout among Agricultural Firms Listed at the NSE.**

The first objective of the study sought to establish the existing trend in dividend payout among agricultural firms listed at the NSE. Using four indicators of dividend payout namely, earnings per share, dividend yield, dividend per share and dividend payout ratio, the study established that although there were fluctuations in raw data in the stated period, the long terms patterns revealed increasing trends in dividend payout indicators over the five year period.

The findings are consistent with findings in other studies which point to average value of a firm being a function of dividend payout (Bitok, 2004; De Angelo et al, 2005). The finding that dividend payout among agricultural firm's was on a general increasing trend support the assertions by Michael Hennessy, managing director of investments Morgan Creek Capital Management who observed in his 2012 report that following the financial crisis of 2008, a time

when earnings growth was stunted and many dividends were cut or discontinued, distributions were by 2012 back on the rise leading to an increasing trend in dividend payments and repurchases.

Similar results showing a rising trend in dividend payout were reported by Singhania (2005). Examining the trends in dividend payout of select Indian companies over the period 1992 – 2004, the study revealed that the average dividend payout ratio increased significantly along with showing a volatile trend ranging from about 25-68% during 1992 – 2004. The findings of an increasing trend in dividend payout indicators further reflects views by Downie (2016) that dividends paid out by members of the S & P 500 have grown steadily since the recession that ended in 2009, as low interest rates and improving financial results drove large corporations to return capital to shareholders

#### **4.8.2 Existing Trend in Performance of Agricultural Firms Listed at the NSE.**

The second objective sought to establish the existing trends in performance of agricultural firms listed on the NSE. Trend analysis results revealed increasing trends in both profitability and leverage of the firms.

The findings indicate that trends observed in dividend payout variables have an impact on firms performance measured in terms of leverage and profitability. The firm's dividend payout was on the rise within the period of interest and so was performance. This is consistent with findings by Amidu (2007) that dividend policy affects firm performance especially the profitability measured by the return on assets. Other findings (Murekefu and Ouma, 2012) have also shown that dividend payout affects firm performance strongly and positively.

The trend patterns showing increment in profitability over the five year period therefore portend well for the agricultural firms in question. This is basing on findings by Murekefu and Ouma (2012) that profitability as well as financial leverage are key factors that affect dividend policy of firms. The findings showing increasing trends in dividend payout indicators leading to increasing trends in profitability and leverage further adds to existing discourse that seemed not to find an acceptable explanation for observed behaviour in dividends (Samuel and Edward, 2011). Consequently, it is safe to argue that whichever way one views patterns in dividend payout, the ultimate picture is that of an overall increasing trends in dividend payout leading to increasing trends in firm performance and vice versa.

#### **4.8.3 Effect of dividend payout on firm performance**

The third objective of the current study sought to determine the effect of dividend payout on firm performance of the agricultural firms listed on the NSE. Multiple regression analysis revealed that earnings per share, dividend yield and dividend per share were significant predictors of leverage. Similarly, earnings per share, dividend yield and dividend payout ratio were significant predictors of firm profitability.

Analysis of firm managers' views revealed that other than the given financial indices, other contextual factors key of which are availability of cash and desire to remain within requirements of the industry play a significant role in determination of dividend payout. Further probing of managers revealed that earnings and yield considerations were deemed very relevant in that whereas earnings determine how much dividend is declared, yield is used to calculate earnings on shares. Besides, it was also revealed that sustainability of constant dividends helps firms to gain competitive advantage and also plan for long term growth. Further, thematic analysis results

clearly showed that firms need for cash was necessary for coming up with financial policies, sustaining firms long term earning power, and helping in deciding the forms of dividends to issue. Moreover, dividend payout in the firms was found to be taken seriously owing to its potential on value addition and wealth maximization

These findings are consistent with findings by Malhotra and Kamuni (2013) that an increase in earnings per share will invariably bring about a significant increase in market prices of equity shares. The findings further reflects findings show that earning per share is a major determinant regression coefficient for dividend yield and dividend yield has an inverse relationship with that of market price. These findings also support findings of others (Zahir, 1992, Infan&Nishat, 2002). The finding that earnings per share significantly predict dividend payout is consistent with findings by Pradhan (2003) and Khan (2009), who find a positive and significant relationship between cash dividends per share and closing price of the firm. Moreover, this finding supports findings by Pan (2007), and Salih (2010) that there exist a positive and significant relationship between earnings per share and the closing price of the firms stock.

Findings showing that dividend payout is a function of profitability lend support to several other findings (Amidu& Abor, 2006; Al-Shubiri, 2011; Eriotis, 2005; Al-Malkawi, 2007). It has further been demonstrated that dividend increases are associated with future profitability (Nissim&Zir, 2001). Moreover, Farsio et al. (2004) contend that an increase in dividends may be the result of good performance in previous periods which may continue into the future. In line with these views the findings further support findings by Barron (2002) that healthy dividends payouts indicate that companies are generating real earnings as opposed to cooking books.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter summarizes the results of the study and reports the conclusions drawn. In addition, recommendations for theory and practice are also highlighted. The chapter concludes by providing potential avenues for future research.

#### 5.1 Summary of Findings

The purpose of this study was to investigate the effect dividend payout on the financial performance of firms listed at the NSE under the agricultural sector. To this end, the study developed models that predict firm performance in terms of firm's growth, shareholders value and profitability given existing trends in dividend payout. The study revealed that there were increases in long term trends of the four dividend payout variables thus an increase in dividends payout within study period. Multiple regression analysis revealed that earnings per share, dividend yield and dividend per share were significant predictors of shareholders value and level of growth. Equally, earnings per share, dividend yield and dividend payout ratio were significant predictors of firm profitability. This study examined the effects of dividend payout among agricultural firms, we found, inter alia, that there is a positive relationship between the dividend payment and profitability. An increase in dividend payout the firms is a sign of increase in profits. Firm's growth level affects the level of its retained earnings and subsequently the amount



to given to shareholders in terms of dividends, hence a decrease in dividend payments is an indicator of firm growth using internal sources.

Analysis of firm managers' views revealed that other than the given financial indices, other contextual factors key of which are availability of cash and desire to remain within requirements of the industry play a significant role in determination of dividend payout. Further probing of managers revealed that earnings and yield considerations were deemed very relevant in that whereas earnings determine how much dividend is declared, yield is used to calculate earnings on shares.

Besides, it was also revealed that sustainability of constant dividends helps firms to gain competitive advantage and also plan for long term growth. Further, thematic analysis results clearly showed that firms need for cash was necessary for coming up with financial policies, sustaining firms long term earning power, and helping in deciding the forms of dividends to issue. Moreover, dividend payout in the firms was found to be taken seriously owing to its potential on value addition and wealth maximization

## **5.2 Conclusion**

Dividend Payout has a significant effect on financial performance of The Agricultural firms listed in Nairobi Securities Exchange Market. The constant payment of dividends payout increases the value of shares, shareholders confidence and firm's financial performance. The management of the firms should be carefully on the forms of dividends to issue whether stock or

cash, the consistency of dividend payouts these will propel growth level and financial performance of the firm. It's on these that the null hypothesis is rejected that Divided Payout has no significance on financial performance of Agricultural firms listed at Nairobi Securities Exchange Market.

### **5.3 Recommendations of the Study**

The following recommendation are made for further study: The major causes of dividend payout instability in agricultural firms listed in Nairobi Securities Exchange, contribution of dividend payout to delisting of firms from Nairobi Securities Exchange though the Kenya Gazette legal notice No.60 (2002) made it mandatory and whether dividend payout trends have become management tool of shareholders manipulation.

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## **APPENDICES**

### **Appendix I: LETTER OF INTRODUCTION**

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#### **RE: EFFECTS OF DIVIDENDS PAYOUT ON THE FINANCIAL PERFORMANCE OF AGRICULTURAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE**

I am a student at Rongo University. I am required to carry out research study in partial fulfillment of requirement for award of Master's Degree in Business Management. My research will focus on the above topic.

You have been selected to form part of the study and I am requesting you to complete the attached questioner to facilitate the study. The information provided will be for academic purposes and will be treated with strict confidence.

Yours Faithfully,

Jessica Oyweka Seda

## Appendix II

### Secondary Data Collection Tool

#### Earnings per Share

Firm	2008	2009	2010	2011	2012
EAAGARDS			1.47	.93	1.36
KAKUZI					
KAPCHORUA TEA					
LIMURU TEA					
REA VIPINGO					
SASINI					
WILLIAMSON TEA					

#### Dividend yield %

Firm	2008	2009	2010	2011	2012
1					
2					
3					
4					
5					
6					
7					

### Dividends per Share

Firm	2008	2009	2010	2011	2012
1					
2					
3					
4					
5					
6					
7					

### Dividend Pay-Out Ratio %

Firm	2008	2009	2010	2011	2012
1					
2					
3					
4					
5					
6					
7					

## Financial Performance

### Profitability

Variables	2008	2009	2010	2011	2012
Return on capital employed					
Return on shareholders' Fund					
Return on Total Assets					
Earnings per share					

### Leverage

Variables	2008	2009	2010	2011	2012
Total companies liabilities					
Total companies Assets					

### Appendix III

#### Firm Management Questionnaire

#### SECTION 1; Please tick or circle the numbers as appropriate

Below are statements about factors that could determine the firm's dividend payout. Please indicate how important each of these factors is to the firm in which you belong. Use the response scale below.

-----0-----                  -----1-----                  .....2.....  
 Of no importance                  of slight importance                  of moderate importance  
 .....3.....                  .....4.....  
 Of great importance                  of maximum importance

Anticipated level of firm's future earnings	0	1	2	3	4
Pattern of past dividends	0	1	2	3	4
Availability of cash	0	1	2	3	4
Concern that changes in dividends may trigger false signals to investors	0	1	2	3	4
Characteristics and requirements of the shareholder	0	1	2	3	4
Legal listing (list of solid firms available for institutional investment)	0	1	2	3	4
Preference for dividends rather than risky investment	0	1	2	3	4
Desire to conform to industry dividend practice	0	1	2	3	4
Bond indenture provisions	0	1	2	3	4
Cost of raising external funds	0	1	2	3	4

Concern about making a target capital structure	0	1	2	3	4
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**SECTION 2: Please fill in the following open ended items**

How relevant are earnings and yield considerations when assessing dividend payout?

**Options:** very          somewhat          not

**Probe:** what exactly are their contributions?

Please describe the need for sustainability of constant dividends with regards to dividend payout

How does the need for cash and growth impact on dividend payout in your firm?

Does the firm adhere to political, regulatory, and banking considerations?

**Probe:** Explain

Dividends are designed to reward shareholders for their loyalty. How likely it is that dividend payout in your firm is a gimmick to show obligation to shareholders in meeting objectives?

**Options:** very          somewhat          Not

**Probe:** Explain your response?

In your view is the firms' dividend policy aligned to the industry practice? Explain

## Appendix IV

TABLE2. Critical Values of the Durbin-Watson Statistic

Sample Size	Probability in	$k = \text{Number of Regressors (Excluding the Intercept)}$									
	Lower Tail	1		2		3		4		5	
	(Significance Level = $\alpha$ )	$d_L$	$d_U$	$d_L$	$d_U$	$d_L$	$d_U$	$d_L$	$d_U$	$d_L$	$d_U$
15	.01	.81	1.07	.70	1.25	.59	1.46	.49	1.70	.39	1.96
	.025	.95	1.23	.83	1.40	.71	1.61	.59	1.84	.48	2.09
	.05	1.08	1.36	.95	1.54	.82	1.75	.69	1.97	.56	2.21
20	.01	.95	1.15	.86	1.27	.77	1.41	.63	1.57	.60	1.74
	.025	1.08	1.28	.99	1.41	.89	1.55	.79	1.70	.70	1.87
	.05	1.20	1.41	1.10	1.54	1.00	1.68	.90	1.83	.79	1.99
25	.01	1.05	1.21	.98	1.30	.90	1.41	.83	1.52	.75	1.65
	.025	1.13	1.34	1.10	1.43	1.02	1.54	.94	1.65	.86	1.77
	.05	1.29	1.45	1.21	1.55	1.12	1.66	1.04	1.77	.95	1.89
30	.01	1.13	1.26	1.07	1.34	1.01	1.42	.94	1.51	.88	1.61
	.025	1.25	1.38	1.18	1.46	1.12	1.54	1.05	1.63	.98	1.73
	.05	1.35	1.49	1.28	1.57	1.21	1.65	1.14	1.74	1.07	1.83