THE RELATIONSHIP BETWEEN EARNINGS PER SHARE AND DIVIDEND PER SHARE OF EQUITIES FOR COMPANIES QUOTED AT THE NAIROBI STOCK EXCHANGE

BY

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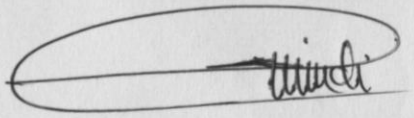
D/P/61/7249/04

A MANAGEMENT RESEARCH PROJECT SUBMITED IN PARTIAL FULFILMEMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER IN BUSINESS ADMINISTRATION (MBA), UNIVERSITY OF NAIROBI

Declaration

This is my original work and has never been presented for the award of a degree to any other university.



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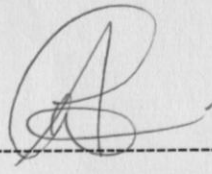
This project has been submitted for examination with my approval as the university supervisor.



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Dedication

I dedicate this project to my daughter Gertrude Muthoni

Acknowledgement

I would like to thank my supervisor Mrs. Angela Kithinji for her persistent efforts in guiding me to finalization of this project paper.

Regards to my family for providing the much needed moral support and accepting my being away from home throughout the period of study.

To my employer, it is a big thank you for allowing me time-off from work to undertake this project.

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Acronyms and Abbreviations

AIMS	Alternative Investment Market Segment
APT	Arbitrage Pricing Theory
CAPM	Capital Asset Pricing Model
CMA	Capital Markets Authority
DPS	Dividends Per Share
EPS	Earnings Per Share
FISMS	Fixed Income Security Market Segment
IAS	International Accounting Standards
MM	Modigliani and Miller Theory
NPV	Net Present Value
NSE	Nairobi Stock Exchange

Abstract

This study was undertaken with a view of establishing whether there exist any relationship between the Earnings Per Share and Dividend Per Share of equities for companies quoted on the Nairobi Stock Exchange; for the years from 2000 to 2004.

Data extracted from published financial statements and published in the NSE Handbook 4th Edition and was analyzed using SPSS with focus on regression model and was presented using tables, graphs and charts.

The findings of the study reveal that there is a significant relationship between Earnings Per Share and Dividend Per Share. The findings also reveal that the relationship between the two variables is significant. This is in line with the expectations that dividends must be paid out of company earnings. Of interest is the fact that whereas the Agricultural sector, Commercial and Service sector, Industrial and Allied sector and the Alternative Investment Market of the market report a positive relationship between the Dividend Per Share and Earnings Per Share the Finance and Investment sector report a negative relationship between the two variables. The exception in the later may be explained by the fact that the sector may occasionally be paying dividends out of past earrings.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The earnings of a company are its profits, that is, the income less the expenses of the firm. It is important for a firm to determine the amount of profits that have on average been earned by each share as it gives an indication of the returns to the shareholders. Earnings is that the level of net profit that is used to calculate the earnings per share, and any profit owed to preference shareholders or after deducting the minority interest. In other words the level of profit used is that profit that actually belongs to the ordinary shareholders.

EPS serves as an indicator of a company's profitability. In calculating EPS, it is more accurate to use a weighted-average number of shares outstanding over the reporting term, because the number of shares outstanding can change over time. However, data sources sometimes simplify the calculation by using the number of shares outstanding at the end of the period. Diluted EPS expands on the basic EPS by including the shares of convertibles or warrants outstanding in the outstanding number of shares. Earnings Per Share is generally considered to be the single most important variable in determining a share's price. It is also a major component of the price-to-earnings valuation ratio

Since the shareholders are the owners of the company, they are entitled to their share of the profits. This is paid out as a dividend, and is usually expressed as an amount per share. This is because the total amount a shareholder earns has to reflect their share of the company. If they are only a small shareholder and do not own many shares, they would only receive a small share of the profit. The dividend per share shows how much the company has paid out on each individual share during the year. Some companies pay out interim dividends after six months, and this should be included as well as the final dividend. Dividend per share is a simple and intuitive number. It is the amount of the dividend that a shareholder will receive for each share they own given by - total dividends paid ÷ number of shares in issue

Dividends are paid to holders of shares on the "record date" which will be announced beforehand by the company. More important from an investor's point of view is the ex-dividend date after which shares bought or sold on a stock exchange under normal terms will

be sold without the dividend (so that the seller will get the dividend). Companies may pay interim dividends during the year as well as a final dividend. These should all be added together to obtain the total annual amount in order to calculate the dividend yield and other ratios.

Special dividends may also be declared. The main significance of a dividend being declared a special dividend is that it is a signal to investors that it is not part of a company's normal dividend policy and therefore does not indicate that future similar dividends will be paid annually, as is otherwise the case. Most companies avoid dividend cuts unless their financial condition demands it or there has been some other change in the business or its capital structure. As a result of this increase in the dividend is taken to be a sign that the management is confident that the new level can be maintained or improved

When the directors of a firm announce the results of the trading period and declare the interim or final dividends, the shareholders are excited because their wealth has increased, there is capital appreciation or there is readily available cash for them. To the older shareholders they would prefer cash dividend to be paid while the youngsters would prefer retention hence the capital gain while others would be indifferent and may be interested in both cash dividend and retention of the money in the firm to earn for capital gain in future. Each group will be interested in a different objective in their organization's stake. Regardless of the mode of dividend payment, the ideal position is that there are some financial gains to the shareholders for their investment. Brigham and Gapenski (1993) observed that an announcement of dividend change may be received with mixed reactions from the shareholders, as it happened with IBM in America when it slashed its quarterly dividend which led to the resignation of the IBM's Chief Executive Officer (CEO).

Farrell (2000) observed that, in modern financial markets, investors are flooded with a variety of sources of information, such as corporations' earnings reports, revision of macroeconomic indexes, policy makers' statement or even big events in people's daily life. Investors in the market use these pieces of information to update their beliefs of the basic state variables of the economy, for instance, the future growth rate information, the inflation rate, information availability and the interest rate signals available to them. As a natural consequence, an important issue in financial theory related to these facts is to have a good understanding of the relationship availability between the quality of information that investors receive and asset

prices behavior. For instance, one may ask, what kind of effect does a noisy signal on the "health" of the economy have on stock market prices and more so, on the earnings per share and the dividend yield?

In an effort to understand the behavior of asset prices, financial economists have assembled long time series and panels of asset returns. For example, Schwert (1990) and Siegel (1992a, 1992b) put together various time series for US equity, bond, and/or risk less asset returns going back well into the 1800's. Jorion and Goetzmann (1999) assembled a panel of stock market returns in various countries over the 20th century in order to determine whether selection bias accounts for some of the Mehra and Prescott (1986) equity premium puzzle. Froot, Kim, and Rogoff (1995) collect over 700 years of data on the relative prices of various commodities in an attempt to determine whether purchasing power parity holds in the long run.

Their findings were that high spread predicts high stock returns; high turnover predicts low returns. The liquidity variables dominate traditional predictor variables such as dividend yield. The evidence suggests that time-series variation in aggregate liquidity is an important determinant of conditional expected returns from the stock market.

1.2 Statement of the Problem

There are a number of reasons that have contributed to the underdevelopment of the Kenyan stock market. The main reason is lack of proper corporate decisions and making informed strategic decisions based on the variables that needs to be considered. Majority of Kenyans are faced with the problem of where to invest their money for better returns. Decisions of most investors are not well calculated to help them achieve their objectives effectively and to maximize returns. This is also characterized by the fact that they do not know how to make accurate stock market decisions.

Investors purchase shares because they expect a return from their investment. The return can be in form of dividends or capital gains. The dividend clientele effect contends that the nature of shareholders of firm determines the nature of dividend policy a firm will adopt. Theories explaining dividend policies adopted by different firms includes; the signaling theory, bird in hand theory, tax differential theory and dividend clientele theory, among others.

Kiogora (2002) studied the nature of capital structures employed by companies quoted at the NSE, specifically whether the capital structures differ per industry category and whether companies in the same sector have similar capital structures. Ndiangui (1992) study focused on the effects of a firm's capital structure on the risk of common stocks for companies quoted at the NSE excluding the earnings. It is not clear what factors investors use when venturing into stock market investments activities, and the question is what investors have gone wrong and what other factors they need to consider in evaluating the shares quoted on the Nairobi Stock Exchange and the earnings realized. Lutomia (2002) studied the relationship between capital structure and the systematic risk of common stocks focusing on companies quoted at the NSE. Kamere (1987) study on capital structure studied the correlations between capital structure and some factors such as firm growth, size and investment and also investigated whether some of these factors have a greater influence than others

Dividends are paid out of distributable profits and a paid in proportion to the number of shares held. The distribution of dividends to the shareholders is not clear the mechanisms that are in place and how effective it is, hence the uncertainty surrounding the puzzle. The relationship between Earnings Per Share and Dividend Per Share of companies quoted on the Nairobi Stock Exchange is not known.

1.3 Objectives of the Study

To determine the relationship between the Earnings Per Share (EPS) and the Dividend Per Share (DPS), of companies quoted on the Nairobi stock Exchange (NSE).

1.4 Importance of the Study

The proposed study will be of great significance to the following parties who will make use of it regularly in the implementation of strategic management policies and make informed decisions.

1.4.1 The Government and other Regulators

Regulators like the government, the Capital Markets Authority (CMA), the Central Bank would find the study important in that the study would provide useful information to them in making informed decisions. They need this study so as to formulate policies and regulations that would encourage investment in the country and not discourage them. The government will

be interested in realizing and collecting the much-needed revenue to financing the public expenditures through the government monetary and fiscal policies.

1.4.2 Foreign Investors

Lack of vital reinvestment information to foreign investors has contributed to the low investment of foreign investment and particularly to Kenya. The market is not efficient enough so as to provide information to the necessary investors. This study would provide a guide to the foreign investors who would be having interest in tapping some of the investment opportunities that exist in business.

1.4.3 Individual Investors

Due to the problem of the adverse selection or information asymmetry individual investors may not obtain all the material facts about the firm they intend to invest on and will demand a higher rate of interest on equity than the debt. In an economy where investors save, they are able to invest thereby boosting the growth of that particular economy. Individuals just like corporate bodies, also need to calculate their investment. The study would therefore be a guide to them, as it would bring out clearly some of these factors that a noble individual investors should consider while reinvesting.

1.4.4 Corporate Mangers and Directors

The corporate managers and directors will need to assess the financial standing of the company including the financial health and credibility of their firms.

1.4.5 Investment Advisors

Investment advisors just like stockbrokers and agents need to advice their role well by advising both institutional investors and individuals. The study would also encourage individual investors since they would be able to get some of the information, which would initially no be available and make informed decisions.

1.4.6 Academicians

The findings of this research would be basic to academicians and would help them to carry out further research in the field of finance. This would further help them realize some of the specific factors that apply to business as compared to what theorist say about the capital structure.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Perspective of Stock Ratios

Farrell (2000) stated that investors commonly use stock ratios such as the price to earnings, price to book ratio, Earnings Per Share and dividend yield to assess the financial health of a company because the ratios concisely benchmark a company's financial status.

Likewise, the efficiency of the security markets, and the determinants of security prices have been much researched especially in the framework of the Capital Asset Pricing Model CAPM (Sharpe 1963), and Arbitrage Pricing Theory (APT) (Ross 1976). Despite this fact, both the practice, and theory of classifying the numerical security characteristics information is at its infancy.

With the increasing number of numerical indicators on securities (such as price/earnings, earnings per share, dividend yield, efficient yield, betas, etc.) it is important both from the viewpoint of practice and research to establish what the factual informational content of these numerical security characteristics are. What information is overlapping, are there distinct classes of numerical security characteristics, and what are their relationships to firms' financial statement numbers? (Mwangi1994). For example the results on the CAPM have had quite low correlation coefficients, (Friend and Blume, 1970; Friend and Blume, 1973; and Levy and Sarnat, 1986). Thus the results may be reflection of low explanatory power of the market models.

2.2 Returns

These are earnings from an investment in form of capital gain and/or dividends. The investor expects high returns from the investment if the investment is perceived to be high risk. The investor needs to be compensated for taking the high-risk investment; otherwise lower risk will suffice if risk were considered low, (Yli-olli et al, 1990).

Companies are under no restrictions to pay dividends. The directors may choose either to declare dividends or not in any one year, which may be paid in form of cash or stock dividends. Each company chooses its own dividend policy that it deems best to serve its

investment and the shareholders interests so as to maximize the shareholders wealth. Investors, as far as returns are concerned, therefore consider many factors when choosing an investment. Among the factors considered by the investors include, profitability of the firm, past and the forecasts future profits, liquidity position of the firm, the assets of the firm in form of liquidity, value, monetary and fiscal policies of the government, industrial factors affecting the industry in which the firm operates, financing policy and the capital structures, and other factors like future expansions plans, diversification into new markets and management of staff of the organization (Black and Scholes, 1974).

Investors relate expected returns from investment to overall market returns and the cost of capital before deciding on whether to invest or not. If the expected returns are lower than the market returns, then the investment will be abandoned. Similarly the investment will equally not be undertaken if the returns are lower than the cost of capital.

2.3 Earnings Per Share

2.3.1 Meaning and Disclosures of Earnings Per Share

Earnings Per Share is calculated by dividing the net profit after tax of a company (less any dividends on preference shares that the company may have paid) for a given year or period by the number of equity shares outstanding at the end of the year. The EPS does not reveal the quality of earnings, but as a thumb rule, the higher the EPS, the better, (IAS 33.66, 2005). International Accounting Standards (IAS) 33 Earnings per Share was issued in December 2003 and is applicable for annual periods beginning on or after 1 January 2005. IAS 33 prescribes principles for the determination and presentation of earnings per share, so as to improve performance comparisons between different reporting entities in the same reporting period and between different reporting periods for the same entity. IAS 33 is applied by entities whose ordinary shares or potential ordinary shares are publicly traded and by entities that are in the process of issuing ordinary shares or potential ordinary shares in public markets. If another entity chooses to disclosure earnings per share information, such information is calculated and disclosed in accordance with IAS 33. An entity presents on the face of the income statement basic and diluted earnings per share for each class of ordinary shares that has a different right to share in profit for the period. An entity calculates basic and diluted earnings per share for profit or loss from continuing operations attributable to the ordinary equity holders of the parent entity. If an entity reports a discontinued operation, it also discloses basic and diluted earnings per share for the discontinued operation.

The number of ordinary shares is the weighted average number of ordinary shares outstanding, as calculated for basic earnings per share, plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares. Potential ordinary shares are treated as dilutive when their conversion to ordinary shares would decrease earnings per share or increase loss per share from continuing operations (e.g. options and warrants, convertible instruments, contingently issuable shares). IAS 33 specifies disclosures about earnings per share information.

2.3.2 Basic Earnings per Share

A basic earnings per share is calculated by dividing profit or loss attributable to ordinary equity holders of the parent entity (the numerator) by the weighted average number of ordinary shares outstanding (the denominator) during the period The profit or loss attributable to the parent entity is adjusted for the after-tax amounts of preference dividends, differences arising on the settlement of preference shares, and other similar effects of preference shares classified as equity. The weighted average number of ordinary shares outstanding during the period and for all periods presented is adjusted for events, other than the conversion of potential ordinary shares that have changed the number of ordinary shares outstanding without a corresponding change in resources, for example, bonus issue or a share split, (IAS 33.10-14, 2005).

2.3.3 Diluted Earnings per Share

Diluted earnings per share is calculated by adjusting the profit or loss attributable to ordinary equity holders of the parent entity, and the weighted average number of ordinary shares outstanding, for the effects of all dilutive potential ordinary shares. The profit or loss attributable to ordinary equity holders of the parent entity, as calculated for basic earnings per share, is adjusted for the after-tax effects of any dividends or other items related to dilutive potential ordinary shares deducted in arriving at profit or loss attributable to ordinary equity holders, any interest recognized in the period related to dilutive potential ordinary shares; and any other changes in income or expense that would result from the conversion of the dilutive potential ordinary shares, (IAS 33.26-44, 2005).

2.4 Earnings Yield

This is earnings per share as a percentage of current market prices per share. Earnings yield is useful in estimating share prices. The earnings yield is the inverse of the P/E: the ratio of earnings to price, and is usually -- by analogy to dividend yield -- described as a percentage; it can be understood as ``the amount of earnings you buy with one dollar of stock." (Yli-olli et al, 1990)

2.5 Dividend Theories

Theories on dividend have been researched on by Modiglian and Miller (1961); Ross (1979); Brealey et al (1991) and Gordon and Linter (1963) among others.

2.5.1 Dividend Irrelevance Theory

2.5.1.1 Value of Stock

Modigliani and Miller (1961), states that the dividends a corporation pays does not affect the value of its shares or the returns to investors, because the higher the dividend, the less the investor receives in capital appreciation, no matter how the corporation's business decisions turn out. This assumes that dividend paid does not influence the corporation's business decisions. It either reduces the amount of cash equivalents held by the firm or increases the amount of money raised by issuing securities.

If a firm pays no dividend, then the theorem holds that a firm that pays a regular dividend equal to about half of its normal earnings will be worth the same as an otherwise similar firm that pays no dividend and will never pay dividend. This is possibly explained by the fact that there are many ways stockholders receive cash without receiving dividend, the firm buys back some of its shares-the advantage is that investors are not taxed as heavily on shares sold as they are on dividend received, the firm can give shareholders jobs at inflated salaries, and buy ordinary goods from other firms owned by the shareholders at inflated prices. Under the assumptions of MM (1961), a firm has value even if it pays no dividends.

Set out their theory against generally accepted thinking that dividends are preferred to retained earnings, and the argument that the higher the dividends the higher the value of the company.

MM (1961) argued that dividend policy has no effects on either the price of the firm's stock or its cost of capital. A firm's value, he argued is determined by the basic earnings power and the firm's risk and not the distribution of earnings. The firm's value is determined by earnings power of its assets or its investment policy, and the manner in which the earnings stream is split between its retained earnings and dividends does not affect its value. Hence, the value of a firm depends on the investment decision and not the dividend policy.

Under this theory, Modigliani and Miller (1961) made the following assumptions no taxes charged on income, no stock floatation costs, no transaction costs and existence of homogenous information or information asymmetry. This dividend theory basically states that a firm's dividend policy has no effect on either its value or its cost of capital

Under the dividend Irrelevance Theory, on one hand there are those who suggest that dividend policy is irrelevant, because they argue a firm's value should be determined by the basic earning power and business risk of the firm, in which case a value depends only on the income (cash) produced, not on how income is split between dividends and retained earnings (and hence growth).

Modigliani and Miller (1961), the proponents of this line of reasoning, contended that investors only care about the total returns they receive, not whether they received those returns in the form of dividends or capital gains. Thus if the dividend irrelevance theory is correct, there exists no optimal dividend policy because dividend policy does not affect the value of the firm.

MM argued that dividend theory has no effect on either the cost of capital or the price of a firm's stock. Therefore the dividend policy that any company applies is irrelevant to the shareholders. MM in their theory stated that a firm's value is dependent upon its expected cash flows and risk class, which in turn is determined by a firm's investment policy. Also the manner in which the earnings are split between dividends and retained earnings, does not influence the firm's value.They further argued that shareholders are able to replicate any dividend pattern that a firm can pay. If investors feel that the current dividend is too low, they can sell some of their shares to realize their desired cash distribution. If they are higher than they desire, then they can buy additional shares in the same firm. This means that the investors are only concerned about the total return on their investments.

Total Return = Dividend payout + capital gains.

2.5.1.2 Taxes

Black et al (1991) observed that because of tax bias each investor determines clearly definable tax based preference and will invest in securities that reflect these preferences. If dividends are more heavily taxed than capital gains, (capital gains are not taxed in Kenya) a firm that pays no dividend will be more attractive to taxable individual investors than a similar firm that pays dividends.

Transaction costs-An investor who holds a non-dividend paying stock will generally sell some of his shares if he needs to raise cash. In some circumstances, he can borrow against his shares. Either of these transactions can be costly, especially if small amounts of money are involved. So an investor might want to have dividend income instead of capital gains.

2.5.1.3 Residual Theory

Under these circumstances, each period the company must decide whether to retain earnings or to distribute part or all of them to stockholders as cash dividends form a residual earnings, that is earnings left over after all suitable (positive NPV) investment opportunities have been financed. With the residual earning, the primary concern of firm's management is investment. Dividend policy becomes irrelevant; it is treated as a passive rather than active decision. The optimal payout ratio is a function of four factors namely the investor's preference for dividends versus capital gains, the firm's investment opportunities, the firm's target capital structure and the availability and costs external capital. The word residual implies the "left over" and the residual policy imply that the dividends are paid from the "left over" of earnings.

2.5.1.4 Pay Out Ratio

Brealey et al (1991) concluded that managers have long-term payout ratio. Managers focus more on dividend changes than on absolute levels, smooth dividends and reluctant to make dividends that might have to be reserved later. These two studies contradict the results of the studies and will show which study is irrelevant to a particular organization.

2.5.1.5 Dividend Policy

Horne and McDonanald (1971) concluded that optimal dividends policy which implies policy should consider the firm's investment opportunities. Any preferences that investor have to

make on dividends as opposed to capital gains and vice versa and should be investigated. There are arguments that dividends might affect the value of the firm in that the investor might have net preference for dividends relative to capital gains and vice versa. This is owing to the uncertainty resolutions, transactions and inconvenience cost and tax differential tax rates.

2.5.2 Dividend Relevance Theories

2.5.2.1 Information Content or Signaling Effect of Dividend

Stephen Ross (1977) observed that there is a strong association between dividend payment and share prices. This theory states that investors regard dividends as signals of managements forecast earnings. If for instance investors expect a company's dividend to increase by 5%, then the stock price generally will not change significantly on the day the dividend increase is announced. If however, investors expect an increase of 10% but the company actually increases the dividend by 20%, this generally would be accompanied by an increase in stock price. Conversely, a less than expected dividend increase, or a reduction, generally would result in a price decline.

It is well known that firms are usually reluctant to cut dividends and therefore managers do not raise dividends unless they anticipate higher or at least stable earnings in the future to sustain higher dividends. This therefore means that a larger than expected dividend increase is taken by investors as a signal that the firm's management forecast improved earnings in the future, whereas a dividend reduction signals a forecast of poor earnings. Thus it can be argued that investors' reaction to changes in dividend payments do not show that investors prefer dividends to retained earnings, rather, the stock price changes simply indicate important information is contained in the dividend announcements, in effect dividend announcements provide investors with information previously only known to management.

MM (1961) argued that investor's reaction to a change in dividend policy does not necessarily show that investors prefer dividends to capital gains, rather the fact that a price change follows a dividend action simply indicates that there is important information or signaling content in the dividend announcement. Ezra (1963) states that dividend may offer evidence of a firm's ability to generate cash. As a result, dividend policy of a firm affects share prices.

2.5.2.2 Bird in Hand Theory

MM's (1961) assumption that dividends do not affect the cost of capital has been hotly contested. Gordon and Linter (1963) argued that investors prefer to receive dividends today rather than wait for capital gains. They argue that current dividends are certain and resolve uncertainty in the investors mind about the future. Because investors are risk averse preferring current to future dividends, near dividends are therefore discounted at a lower rate in comparison to future dividends. Because of this, equity costs reduce with high payout ratios.

In responding to this Modigliani and Miller (1961) stated that, investors are indifferent between dividends and capital gains hence dividend policy has no effect on the cost of capital. They further argued that many, if not most of the investors would reinvest dividends in the same or a similar firm, and further they are concerned about the total risk of the cash flows to the firm and not themselves.

2.5.2.3 Tax Differential Theory

Litzenberger and Ramaswamy (1979) argued that investors have to pay taxes on dividends received and capital gains realized. Capital gains tax rate is lower than ordinary income tax rate and capital gains tax is payable when the gain is realized. Hence from the taxation viewpoint, investors should prefer capital gains to dividends. The value of a firm with a low pay out ratio should therefore be higher than the one with a higher pay out ratio. Due to this Litzenberger and Ramaswamy (1979) argued that MM's (1961) assumption that taxes do not exist is far from reality. John and Williams (1985) offer a model suggesting a reason for taxable cash dividends.

2.5.2.4 Clientele Effect

Petit (1977), this is the tendency of a firm to attract the type of investor who likes its dividend policy. For instance stockholders such as retired individuals prefer current dividends to future capital gains, so they require a firm to pay out a higher percentage of its earnings. Other stockholders (especially young investors) have no need for current income hence prefer a low pay out ratio since they prefer to receive their earnings in future.

If investors could not invest in companies with different dividend policies, it might be very expensive for them to achieve their investment goals. Investors who prefer capital gains could reinvest any dividends they receive, but first they would have to pay taxes on the income. In

essence, then, a clientele effect might exist if stockholders are attracted to companies because they have particular dividend policies. Consequently, we would expect the stock price of a firm to change if the firm changes its dividend policy because investors will adjust their portfolios to include firms with the desired dividend policy.

In response to this MM argued that one client is as good as any other and the existence of clientele effect does not suggest that one dividend policy is better than any other policy. In absence of market imperfections, the switching is quite healthy as a firm would attract some and loose other investors.

2.5.2.5 Positive Dividends Effects

Sherfrin and Statman, (1984), argue that apart from the tax issues, we must recognize an argument for a positive dividend effect. This is the possibility of a preference for dividends on the part of investors for behavioral reasons. Dividends payment is useful for diversification of investments in an uncertain world. Shefrin and Statman (1984), reason that some investors are reluctant to sell shares because they will regret if stock prices rise. For them dividends and the sale of stock for income are not perfect substitutes. A second argument they advanced is that although many investors are willing to consume out of the dividend income they are unwilling to 'dip into capital' gain. To them dividends and the sale of stock are not perfect substitutes for investors. For behavioral reasons, then certain investors prefer dividends.

2.6 Dividend Per Share

The dividend per share shows how much the company has paid out on each individual share, and so is worked out as: -

$$\text{Dividend Per Share} = \frac{\text{Dividends paid}}{\text{Total number of shares issued}}$$

It is important to be aware that the dividends paid figure is that for the whole year. Some companies pay out interim dividends after six months, and this should be included as well as the year-end figure.

Since the shareholders are the owners of the firm, they are entitled to their share of the profits. This is paid out as a dividend, and is usually expressed as an amount per share. This is because

the total amount a shareholder gets has to reflect their share of the company. If they are only a small shareholder and do not own many shares, they should only get a small share of the profit. This is the amount of dividend declared by a company (usually expressed as a percentage of its face value) calculated by dividing dividend declared by total shares as at the end of year.

Dividend payout ratio is considered an indicator of the firm's dividend policy. Theoretically, the question of the dividend payout policy, and its effect (or irrelevance) on the value of the firm is one of the classical topics of finance. By including this variable we do not directly take a stand about the influence of the payout policy on the value of the firm.

Nevertheless, there are arguments for the relevance of the dividend payout decision, which should be revisited here. The generic interpretation is that a relevance of dividend decisions reflects market imperfections. According to the signaling view, changes in the dividends are signals to investors from the management indicating a long-term shift in the firm's profitability and/or financial position. Another important view on the relevance of dividend policy is also known as clientele effect. This effect is based on the idea that firms with different payout policies attract different kind of investors because of the difference in the tax treatment of personal capital gains and dividends, Baker, Farrelly and Edelman (1985).

Technically, calculating the dividend payout ratio can be problematic in firms with unprofitable years. This is because dividends may be distributed even in years with negative earnings (losses). The statutory limit on dividends is set (in Finland) by retained earnings, not the periods earnings alone. Thus the data must be checked for extreme or even negative values.

2.7 Dividend Yield

Dividend yield is a financial ratio that shows how much a company pays out in dividends each year relative to its share price. In the absence of any capital gains, the dividend yield is the return on investment for a stock. This is calculated by annualizing the last observed dividend of a firm and dividing by the current market price. Dividend yield are related to the market's perception of future growth prospects for the firm. Firms with high growth will generally have lower dividend yields and is calculated as shown in the formula below:

$$\text{Dividend Yield} = \frac{\text{Annual Dividends Per Share}}{\text{Price Per Share}}$$

This is dividend paid per share expressed as a percentage of current market prices per share. The Dividend Yield is an easy way to compare the relative attractiveness of various dividend-paying stocks. It tells an investor the yield expected by purchasing a stock. This allows a basis of comparison between other investments such as bonds, certificates of deposit, etc. Dividend yield is normally heavily influenced by market's expectation of future growth in dividend itself and in the share price. High dividend yield is not necessary a signal that the shares are a good buy. Companies with high dividend yields tend to have a low share price because the market has considerable doubts about the future of the company and its ability to maintain, let alone increase the dividend level in future. High dividend yield is in most cases accompanied by high risk.

Dividend yield is used in estimating share price, i.e. dividend per share, divided by dividend yield equal market price per share.

2.8 Factors Considered before Dividend is declared

Factors which must to be considered before dividends are declared by the board and subsequently paid to the shareholders of the company.

Constraints on dividend payments: The amount of dividends a firm can pay might be limited due to, debt contract restrictions, that is no dividends to be paid unless certain financial covenants have been met, such as times interest earned, gearing ratios, and debt service, dividends should not exceed balance sheet item of retained earnings, availability of cash, restrictions imposed by capital markets authority.

Liquidity position: Profits held in retained earnings are usually invested in assets required for the conduct of the business. Retained earnings for previous periods are usually invested in assets and not held in cash. Thus either a firm has a record of its earnings, it may not be able to pay cash dividends because if its liquidity position.

Investment opportunities: Firms with a large number of acceptable capital budgeting projects generally have a low dividend pay out ratio and vice versa. But if a firm can postpone or accommodate projects, then it can adhere more closely to a target dividend policy.

Alternative sources of capital: When a firm needs to finance a given level of investment and floatation costs are high, Ke, cost of equity will be well above Ks, cost of

capital, making it better to set a low pay out ratio and to finance through retention rather than through sale of new common stock. Ownership dilution can be considered when making financing decisions. If management is concerned about maintaining control, it might be redundant to sell new stock; hence the company might retain more earnings than it otherwise would.

Rate of assets growth: If a firm grows rapidly, then the greater will be the need for financing asset expansion. The greater the future needs for funds, the higher the likelihood that the firm will retain earnings rather than pay them out as dividends.

Effects of the dividend policy on cost of capital: This might be considered in terms of four factors, stockholders desire for current versus future earnings, the perceived risk of dividends versus capital gains, the tax advantage of capital gains over dividends and the information content of dividends (signaling).

Legal rules: Legally, dividends must be paid from earnings, either from the current or past trading performance or retained earnings. At the same time dividends cannot be paid from capital, because this would be distributing investments as opposed to earnings. Companies under bankruptcy are restricted from paying out dividends since they are insolvent, i.e. there liabilities exceed their assets

2.9 Dividend policies

Petit (1977) stated that a firm's dividend policy determines the division of earnings between payments to stockholders and further investments in the firm. Retained earnings are usually used to finance expansions, but dividends constitute the cash flows that accrue to shareholders. Therefore a firm's dividend policy would be the decision to either pay out earnings or to retain them for investment in the firm.

According to the constant dividend growth model, the value of common stock can be computed as follows: -

$Po = Ks / (K - g)$

This means that firm value will rise, which will tend to trigger the increase in the price of stock. However if more cash dividends are paid, there will be less money for investments in the

future and the expected future growth rate, g, will be lowered and hence depress the price of stock. The perfect dividend policy is the one that strikes a balance between current dividends and future growth and maximizes the firm's stock price. It is important that the firm decides how much is to be retained and how much is to be invested. If a firm is faced with investing in activities with higher internal rate of return compared to cost of equity, earnings should be used to finance such investments. Whatever is left then can be paid out as dividends. Both dividend and growth are desirable and are always in conflict. The optimal dividend policy therefore is the one that strikes a balance between current dividends and future growth that maximizes the firm's stock price.

2.10 Forms of Dividends

Based on Black (1976), financial economists have now for a long time tried to provide an explanation for the puzzle that companies pay out cash to shareholders using cash dividends rather than share repurchases. Dividends are payments, or distributions, made to stockholders from the firm's earnings. These earnings are either generated in the current or previous periods. For preferred shares, it is generally a fixed amount and for common shares, the dividend varies with the fortunes for the company and the amount of cash in hand. It can be defined as the rate of return that investors earn for investing in the stocks of the issuing company.

2.10.1 Cash Dividend

Many companies pay cash dividend in two stages, the interim dividend that is paid semi annually and the final dividend paid annually. In an efficient market, the announcement of a dividend should not have an effect on share prices. Upon payment of dividends, the market price per share should reduce by the amount of the dividend per share. It is normally observed that earnings as being the primary determinants of dividends but in reality cash flows are even more important.

2.10.2 Stock Dividend or Bonus Share

This is a dividend that is paid in the form of additional shares of stock rather than cash, in addition to the cash already paid out. They are similar to stock splits in that they divide the pie into smaller slices without affecting the fundamental position of the current stockholders. On a 12% stock dividend, the holder of 100 shares would receive an additional 12 shares. A stock dividend involves a book keeping entry from retained earnings to the ordinary share capital.

The stock dividends are not meant to affect shareholders wealth in efficient markets (Copland, 1979).

2.10.3 Stock Repurchase

This is when the company buys back some of its outstanding shares instead of paying out cash dividends. In this case, the shares that have been bought back are referred to as treasury stocks. The stocks that have been bought back are usually not deregistered and cancelled, but kept in the company's treasury and resold when the company needs the money. Shareholders are not required to authorize the resale of these treasury stock and they do not enjoy preemptive rights on such stock (Copland, 1979).

2.11 Relationships between Earnings and Dividends

Dividends are the distribution of earnings of an organization. Dividends payments made by a firm to its owners can either be in cash or in bonus issue also called the income component of the return on an investment in stock. The dividend payout ratio is the amount of cash paid to shareholders expressed as a percentage of earnings per share, while the dividend yield is the, per share of common stock divided by the market per share. Dividend per share is the amount of cash paid to shareholders expressed as a dollar per share.

An Earnings Per Share is obtained by dividing the net income of the company by the number of outstanding shares, as shown by the following formula.

$$\text{Earnings Per Share} = \frac{\text{Earnings before interest and taxes- Preference dividends}}{\text{No of common stock outstanding}}$$

On the other hand dividend per share is obtained by obtained by dividing the declared dividends by the number of ordinary shares as shown by the following formula.

$$\text{Dividend Per Share} = \frac{\text{Dividends distributed to the shareholders}}{\text{No of common stock outstanding}}$$

Dividends are paid from earnings as distribution of income to the owners of the company.

2.12 Other Related Studies

Other factors to consider will include the contributions of the following relationship of capital structure and the pecking order theory. This is relevant in that it is through the capital invested

to the firm that will contribute the earnings of the firm and subsequently the dividend that will be distributed to the shareholders of the organization.

Frank and Goyal (2003), finds that the pecking order slope coefficient has weakened over time, a small growth firms have relied almost exclusively on external equity financing.

Lemmon and Zender (2004) suggest that the wreaking of the standard pecking order in the 1990's is due to largely to the increased proportion of small growth firms. They posit that these firms are debt-constrained and must fund their growth opportunities with external equity. However, we find that small growth firms rely heavily on debt financing and only resort to equity markets when cost of equity capital is low, consistent with market timing theory.

Fama and French (2005) document that firms issue debt even when they have used internally generated funds or issued debts, and interpret this as evidence against the pecking order theory. They suggest that other external equity financing tools such as stock-financed acquisitions and employee stock options plan, allow firms to mitigate information asymmetry problems.

Shyan-Saunder and Myers' (1990) testing of the pecking order hypothesis assumes that the financing deficit of a firm is exogenous. However, firms may jointly determine whether to issue securities and which security to issue. Therefore in order to estimate both whether a firm issue and what security it issues they estimated a multinomial logit model. They found that their proxies for the cost of capital help explain securities issuance decisions even after controlling for changing characteristics.

Baker and Wurgler (2002) finds that external finance-weighted average of historical market-to-book ratios is negatively related to current leverage and suggest that the adjustment towards target leverage is slow.

CHAPTER THREE

3.0 RESEARCH METHODOLGY

3.1 Research Design

The research design was a survey.

3.2 Population

The population compromised 46 listed companies quoted at the Nairobi Stock Exchange, during the years 2000 to 2004.

Due to unavailability of getting the data and the unwillingness of authorities in releasing information on unlisted firms, the population of study was from all the companies listed at the NSE. It has been argued that listed companies are of the greatest interest to the financial community, Rajan & Zingales (1994).

The firms quoted at the NSE are classified into six main industries: Agricultural (4 firms), Commercial and Services (8 firms), Finance and Investment (11 firms), and Industrial and Allied (16 firms), Alternative Investment Market Segment (AIMS) (8 firms). This forms a population consisting of 46 firms.

All the companies quoted on the Nairobi Stock Exchange were studied thus no sampling was required.

3.3 Data collection

The Nairobi Stock Exchange Handbook was the source of secondary data that was used which incorporates all the financial statements for the listed companies and addressed the period from 2000 to 2004. Secondary data was based wholly on the data available from the published annual reports of the respective firms at the NSE library and published in the Nairobi Stock Exchange Handbook.

3.4 Data analysis

The Statistical Package for Social Sciences (SPSS) and Regression Analysis Model were used to analyze the data.

The regression model of the form $\mathbf{Y = a + bX}$ was estimated; where

Y-Dividend Per Share,

X-Earnings Per Share,

a -is a constant term,

b -is the coefficient,

$$\text{Dividend Per Share} = \frac{\text{Dividends distributed to the shareholders}}{\text{No of common stock outstanding}}$$

$$\text{Earnings Per Share} = \frac{\text{Earnings before interest and taxes- Preference dividends}}{\text{No of common stock outstanding}}$$

Tests of significance to establish the strengths of the relationship were done and comparative analysis of companies of different sizes and different sectors were undertaken.

CHAPTER FOUR

4.0 DATA ANALYSIS AND INTERPRETATIONS

4.1 Data Analysis

Various statistical tools have been applied to enable analyze the objective of the study. All the tables have been derived from Appendices 1 and 2. However the figures were obtained from published financial statements of the companies under study and contained in the Nairobi Stock Exchange Handbook 2005 4th Edition. It was possible to extract and condense the data that was useful for the purpose of this study as shown on Appendices 1 and 2. Subsequently various tables, graphs and equations were derived as shown on the succeeding paragraphs. Table 1, 2 and 3 were extracted to enable calculate the relationships between the EPS and the DPS and have been derived from appendices 1 and 2, which shows the EPS and the DPS for all the companies quoted at the NSE for the years 2000 to 2004.

Table 1 below is a summarized average, maximums, minimums and the standard deviations. These are statistical parameters for estimation of the whole market position. It is observed that the highest DPS for the period under study was Kshs. 55.00 for Limuru Tea Company Limited in the year 2000 while the highest EPS is the same company and likewise in the year 2000. The lowest EPS was Kshs –40.33 in the year 2000, and from Appendix 1 it was Kenya Power and Lighting Company Limited when it made a loss of Kshs 3,191,506,000 with 79,128,000 shares outstanding as at the end of the trading period. It is observed that the average EPS for the years under study had been between Kshs 2.25 and Kshs 5.39 while the DPS was between Kshs 1.87 and Kshs 3.16

Table 1 Nairobi Stock Exchange Analysis of Primary Variables

NAIROBI STOCK EXCHANGE ANALYSIS OF THE VARIABLES										
	EARNINGS PER SHARE					DIVIDEND PER SHARE				
VARIABLE	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
AVERAGE	2.48	2.32	2.25	3.54	5.39	3.16	1.87	1.92	3.04	3.01
MAX	59.12	37.21	43.80	46.50	35.05	55.00	14.00	11.50	23.10	18.00
MIN	(40.33)	(36.36)	(23.75)	(38.56)	(11.65)	0.00	0.00	0.00	0.00	0.00
STD DEV.	11.91	9.90	9.29	10.69	7.33	8.45	3.01	2.94	4.98	4.50

Source: NSE Handbook 2004-2005 4th Edition

Table 2 below summarizes the averages, maximums, minimums and the standard deviations for the market segments and within the period 2000 to 2004. As observed from Table 1, there were no significant variations between the years and the market segments. The highest average on EPS recorded was on Industrial and Allied Segment in the year 2004 while Alternative Investments and Market Segment recorded the highest DPS in the year 2000. The spread between the averages is not material enough to distract the trend of the DPS and the EPS.

Table 2 Nairobi Stock Exchange Averages by Sectors

MARKET SEGMENT	EARNINGS PER SHARE					DIVIDEND PER SHARE				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Agriculture	2.52	0.68	0.79	(0.26)	8.52	2.10	0.75	0.81	1.60	3.08
Commercial And Services	1.64	(1.13)	2.97	3.48	3.83	0.69	0.67	0.74	1.18	1.36
Finance And Investments	2.46	4.97	2.02	5.33	4.73	3.22	3.03	2.48	2.65	2.75
Industrial and Allied	0.73	2.90	4.75	4.17	6.46	2.23	2.42	3.12	5.07	4.06
Aims	6.17	(1.01)	(1.89)	0.79	3.47	8.21	0.43	0.57	1.96	2.68

Source: NSE Handbook 2005 4th Edition

The averages, the maximums, minimums and the standard deviations for each company and for the years have been summarized with the results shown on Table 3 below, and the results being, average, maximums, minimums, standard deviation being Kshs 3.19, Kshs 59.12, Kshs –40.33 and Kshs 5.17 respectively. These values obtained will show for example the maximum values of the overall maximums with the value of Kshs 59.12, and similarly all the other values have been obtained an a similar manner, and will have the same interpretations.

Table 3 Nairobi Stock Exchange Analyses of Secondary Variables

NAIROBI STOCK EXCHANGE ANALYSIS OF THE VARIABLES								
	EARNINGS PER SHARE				DIVIDEND PER SHARE			
VARIABLES	AVERAGE	MAX	MIN	STD DEV.	AVERAGE	MAX	MIN	STD DEV.
AVERAGE	3.19	8.55	(1.84)	4.26	2.55	2.58	1.17	1.53
MAX	30.20	59.12	12.91	24.76	16.60	14.62	9.00	22.26
MIN	(26.64)	(0.43)	(40.33)	0.00	0.00	(5.33)	0.00	0.00
STD DEV.	8.01	11.74	8.92	5.17	3.85	4.04	2.22	3.50

Source: NSE Handbook 2005 4th Edition

In calculating the values of the constant **"a"** and the coefficient **"b"** the following two equations have been used,

$$\text{Coefficient} = \mathbf{b} = \frac{N(\Sigma xy) - (\Sigma x)(\Sigma y)}{N(\Sigma x^2) - (\Sigma x)^2}$$

$$\text{Constant} = \mathbf{a} = \frac{\Sigma y - b(\Sigma x)}{N}$$

Where:

N is the number of observations and in our case the five years from 2000 to 2004,

X is the independent variable,

Y is the dependent variable

Σ is "the sum of" or "sigma"

The coefficient **"b"** is the slope of the regression line or the change in Earnings Per Share (EPS) in relation to the change in the Dividend Per Share (DPS). While the constant **"a"** is the Y-intercept or the minimum value of Earnings Per Share.

4.1.1 Analysis for the Agricultural Sector

Figure 1 below shows the relationships between the EPS and the DPS are as per Equation 1 of form **Y = -2.79 + 3.14 X**, derived from Table 4 and it is observed that there is a very close relationship between the two variables. Table 4 summarizes the values used in estimating the constant **"a"** and the coefficient **"b"** which have been used in deriving the line of best fit as shown on Equation 1. The observed values have been derived from Appendix 1.

Table 4 Agricultural Sectors

AGRICULTURE

YEAR	X-DPS	Y-EPS	XY	X^2
2000	2.10	2.52	5.29	4.41
2001	0.75	0.68	0.51	0.56
2002	0.81	0.79	0.64	0.66
2003	1.60	(0.26)	(0.42)	2.56
2004	3.08	8.52	26.24	9.49
TOTAL	8.34	12.25	32.27	17.68

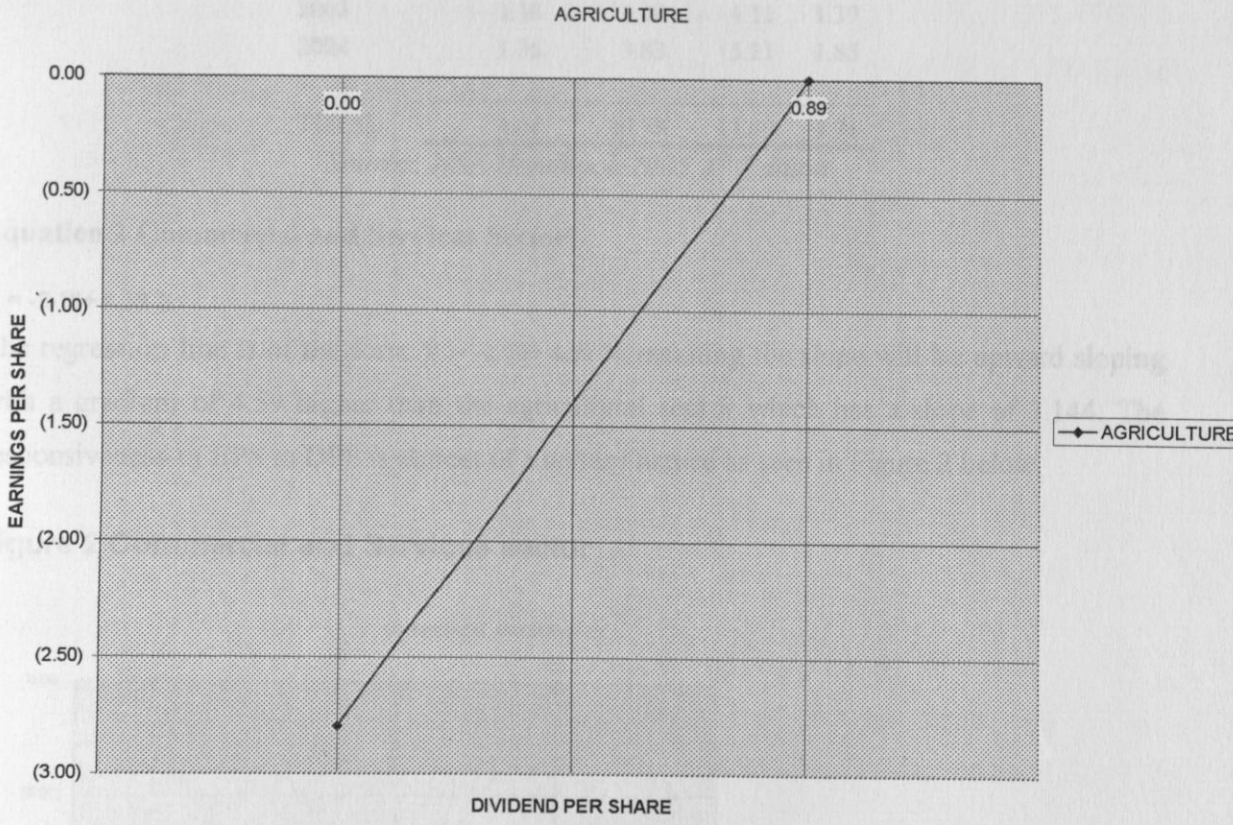
Source: NSE Handbook 2005 4th Edition

Equation 1 Agricultural Sector

$Y = -2.79 + 3.14\ X$

Equation 1 of the form $Y = -2.79 + 3.14\ X$ and h as a positive coefficient, meaning an increase in EPS will have a proportionate increase in the DPS of 3.144, with a constant "a" the Y-intercept being –2.79

Figure 1 Agricultural Sector



Source: NSE Handbook 2005 4th Edition

The slope of the regression line is graphically represented on Figure 1 above, with an upward sloping to the right as precisely depicted from Equation 1, indicating that an increase in DPS will have 3.14 increases in EPS.

4.1.2 Analysis for the Commercial and Services Sector

The equation is of the form $Y = -2.10 + 4.59\ X$, where Y is the dependent variable and X is the independent variable and similarly just like the analysis on agricultural sector the same relationship is observed. Similarly the values in Table 5 have been obtained from Appendix 1,

and the values have been used in the estimation of the regression line which shows the trend of the relationship between the EPS and the DPS.

Table 5 Commercial and Services Sector

COMMERCIAL AND SERVICES

YEAR	X-DPS	Y-EPS	XY	X^2
2000	0.69	1.64	1.13	0.48
2001	0.67	(1.13)	(0.76)	0.45
2002	0.74	2.97	2.20	0.55
2003	1.18	3.48	4.11	1.39
2004	1.36	3.83	5.21	1.85
TOTAL	4.64	10.79	11.89	4.71

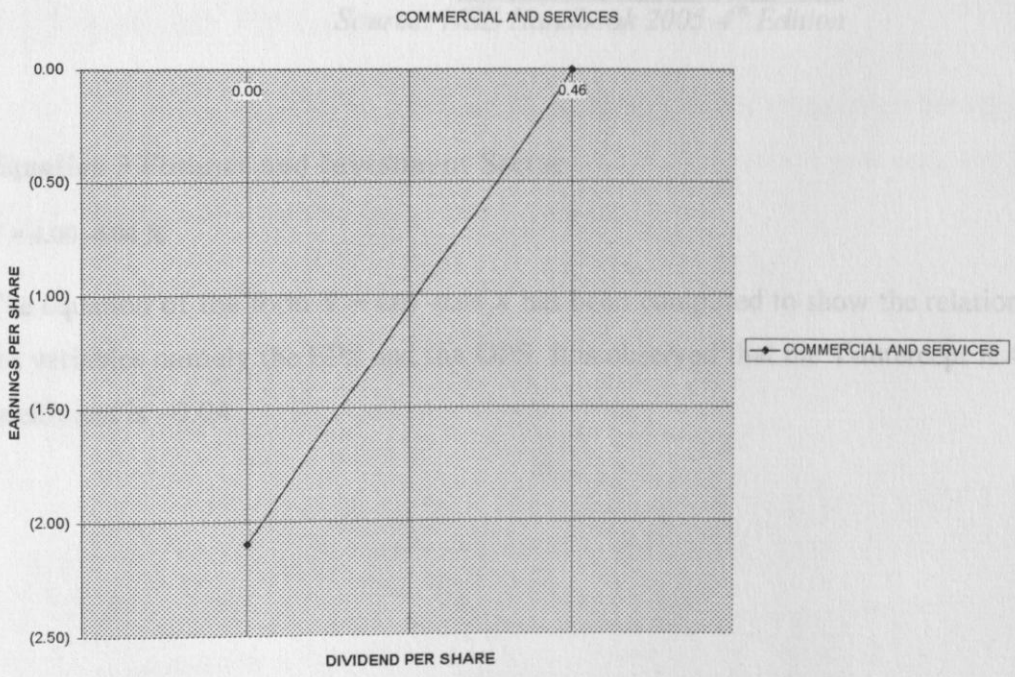
Source: NSE Handbook 2005 4th Edition

Equation 2 Commercial and Services Sector

Y = -2.10+ 4.59 X

The regression line is of the form **Y = -2.10+ 4.59 X,** meaning the slope will be upward sloping with a gradient of 4.59 higher than the agricultural sector which has a slope of 3.144. The responsiveness of EPS to DPS is almost of a unitary nature as seen in Figure 2 below.

Figure 2 Commercial and Services sector



Source: NSE Handbook 2005 4th Edition

Note the regression line Y = -2.10+ 4.59 X is upward sloping and to the right

4.1.3 Analysis for the Finance and Investment Sector

The equation is of the form **Y = 4.00 -0.04 X** and unlike the other market segments; the relationship is the reverse with the regression line having a negative coefficient. The coefficient "b" is negative meaning the slope of the regression line is downward sloping to the right. A change in EPS will have proportional decrease in the DPS, meaning that dividends may have been paid out of previously retained profits, in the year 2000 the average DPS is Kshs 3.22 compared to the EPS of Kshs 2.46 while in the year 2002 the average DPS is Kshs 2.48 as compared to Kshs 2.02 for EPS hence the reason for the downward slope or negative coefficient.

Table 6 Finance and Investments

FINANCE AND INVESTMENTS

YEAR	X-DPS	Y-EPS	XY	X^2
2000	3.22	2.46	7.92	10.37
2001	3.03	4.97	15.06	9.18
2002	2.48	2.02	5.01	6.15
2003	2.65	5.33	14.12	7.02
2004	2.75	4.72	12.98	7.56
TOTAL	14.13	19.50	55.09	40.28

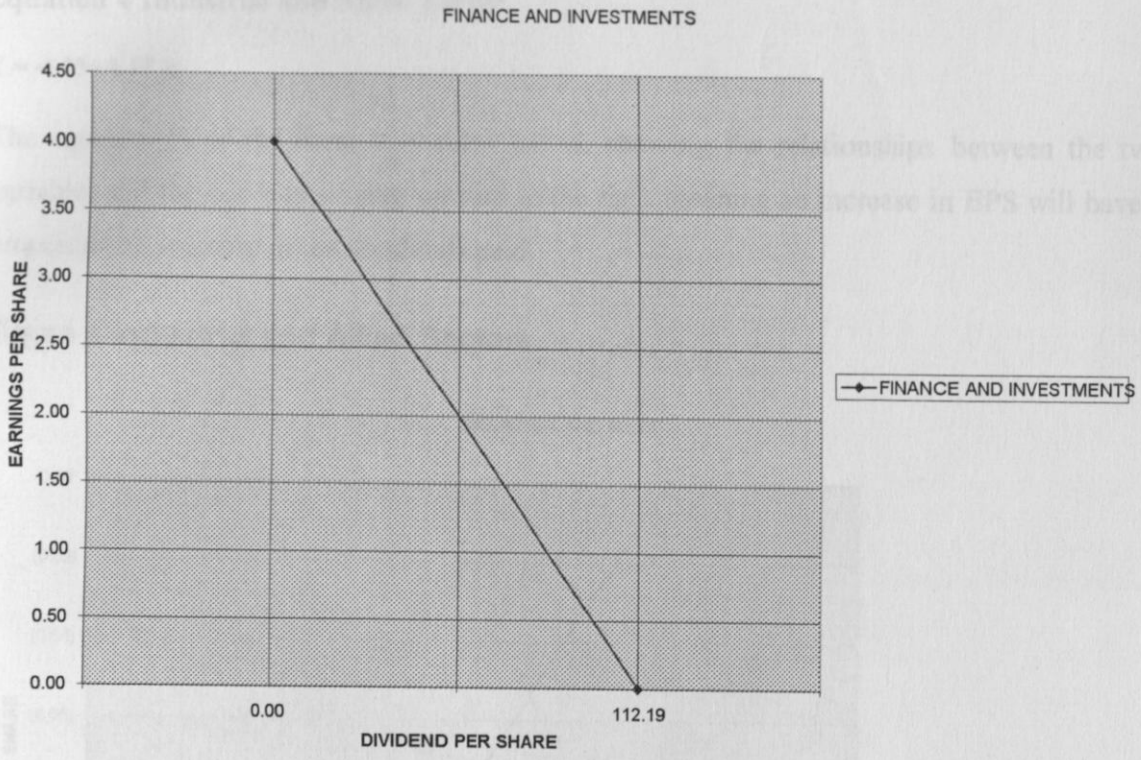
Source: NSE Handbook 2005 4th Edition

Equation 3 Finance and Investment Sector

Y = 4.00 -0.04 X

The equation of the form **Y = 4.00 -0.04 X** has been computed to show the relationship between the variables namely the EPS and the DPS. It is observed that the Y-intercept is 4.00 while the coefficient is –0.04

Figure 3 Finance and Investments Sector



Source: NSE Handbook 2005 4th Edition

The graph above shows the downward sloping of the regression line as per Equation 3 of the form **Y = 4.00 -0.04 X**

4.1.4 Analysis for the Industrial and Allied Sector

Table 7 below shows the values for the computations of the relationship between the EPS and the DPS. These are average values extracted from Appendix 1 and only for Industrial and Allied Sector, and for all the five years under study.

Table 7 Industrial and Allied

INDUSTRIAL AND ALLIED

YEAR	X-DPS	Y-EPS	XY	X^2
2000	2.23	0.73	1.63	4.97
2001	2.42	2.90	7.02	5.86
2002	3.12	4.75	14.82	9.73
2003	5.07	4.17	21.14	25.70
2004	4.06	6.46	26.23	16.48
TOTAL	16.90	19.01	70.84	62.75

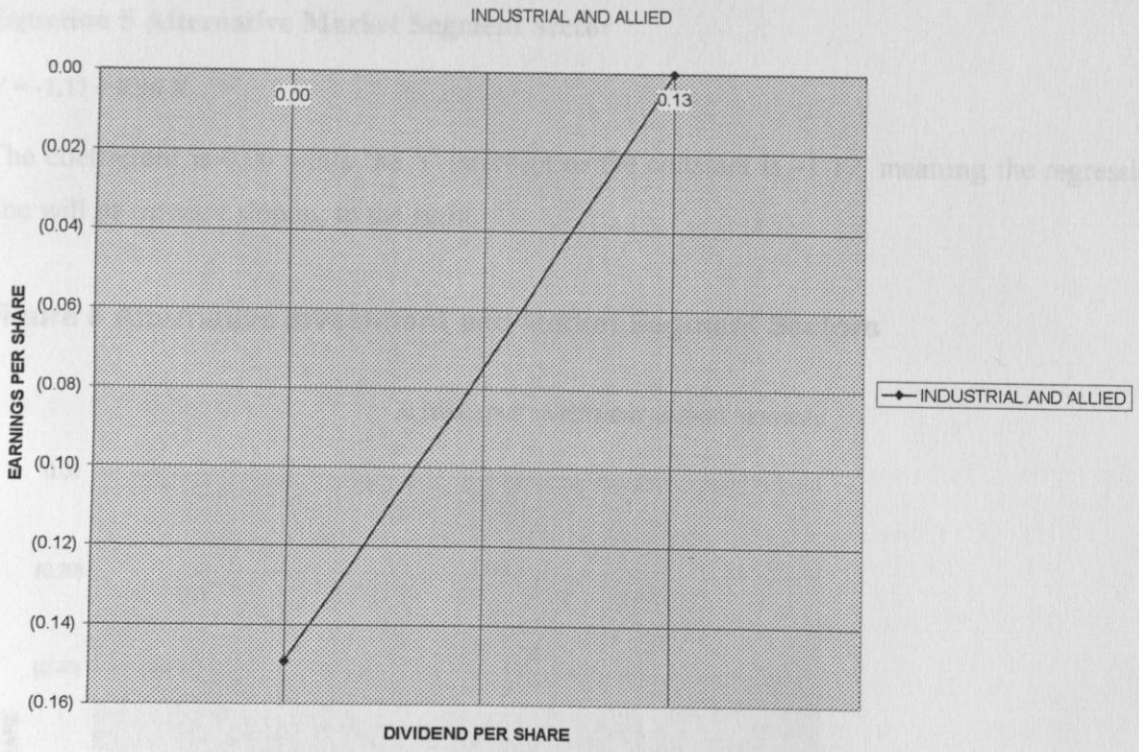
Source: NSE Handbook 2005 4th Edition

Equation 4 Industrial and Allied Sector

Y = -0.15+ 1.17 X

The equation is of the form **Y = -0.15+ 1.17 X**, showing the relationships between the two variables and the curve is sloping upward to the right meaning an increase in EPS will have a proportionate increase in the dividends paid.

Figure 4 Industrial and Allied Sectors



Source: NSE Handbook 2005 4th Edition

Equation 4 is plotted on Figure 4 and the true position of the slope of the curve is seen precisely.

4.1.5 Alternative Investment and Market Segment Sector

The relationship between the two variables is of the form **Y = -1.17 + 0.96 X** and the curve is sloping upward to the right with a coefficient of 0.09 In the calculation of the regression line using the regression analysis model, the values in Table 8 will have to be obtained first hence the need for the table.

Table 8 Alternative Investments and Market Segment Sector

AIMS

YEAR	X-DPS	Y-EPS	XY	X^2
2000	8.21	6.17	50.66	67.40
2001	0.43	(1.01)	(0.43)	0.18
2002	0.57	(1.89)	(1.08)	0.32
2003	1.96	0.79	1.55	3.84
2004	2.68	3.47	9.30	7.18
TOTAL	13.85	7.53	59.99	78.94

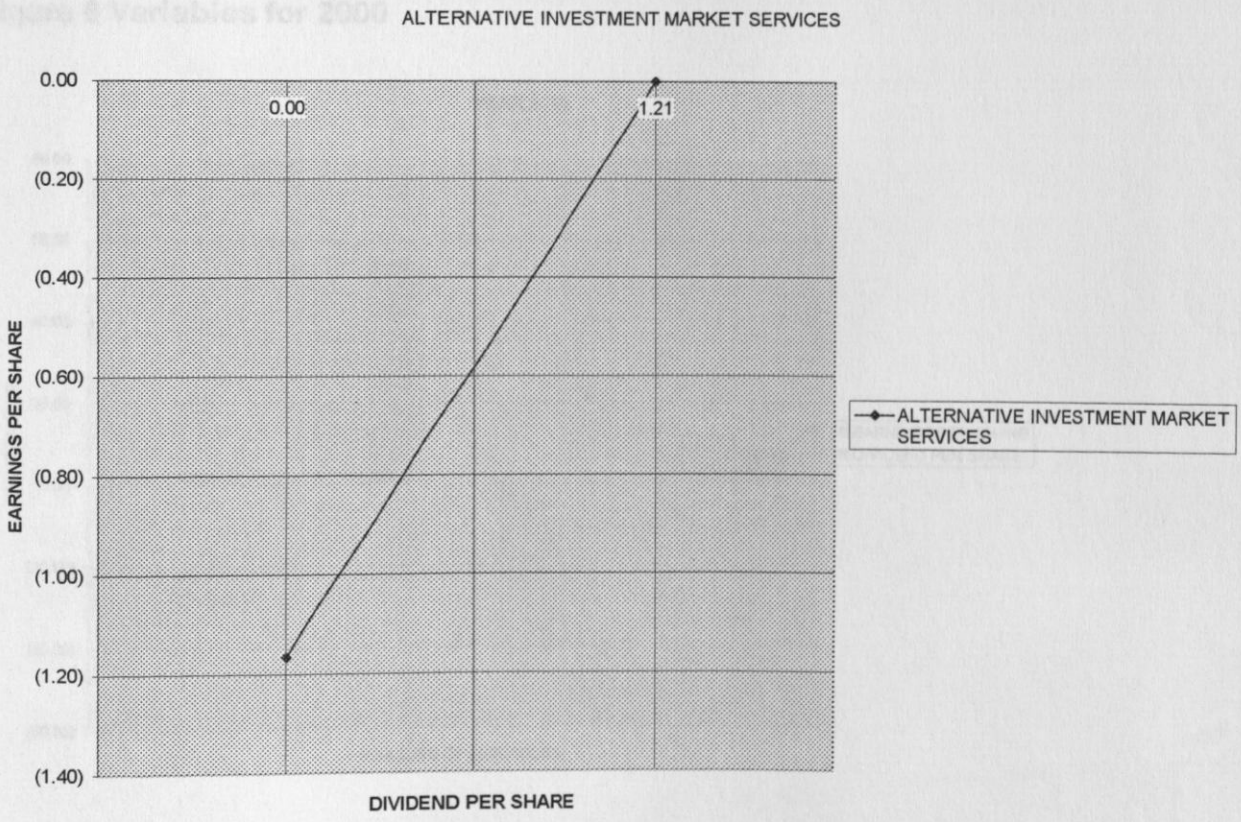
Source: NSE Handbook 2005 4th Edition

Equation 5 Alternative Market Segment Sector

Y = -1.17 + 0.96 X

The coefficient is 0.96 while the Y-intercept or the constant is –1.17, meaning the regression line will be upward sloping to the right.

Figure 5 Alternative Investment and Market Segment Sectors



Source: NSE Handbook 2005 4th Edition

The above graph has been plotted to show the visual relationship between the two variables.

4.1.6 Analysis for the year 2000

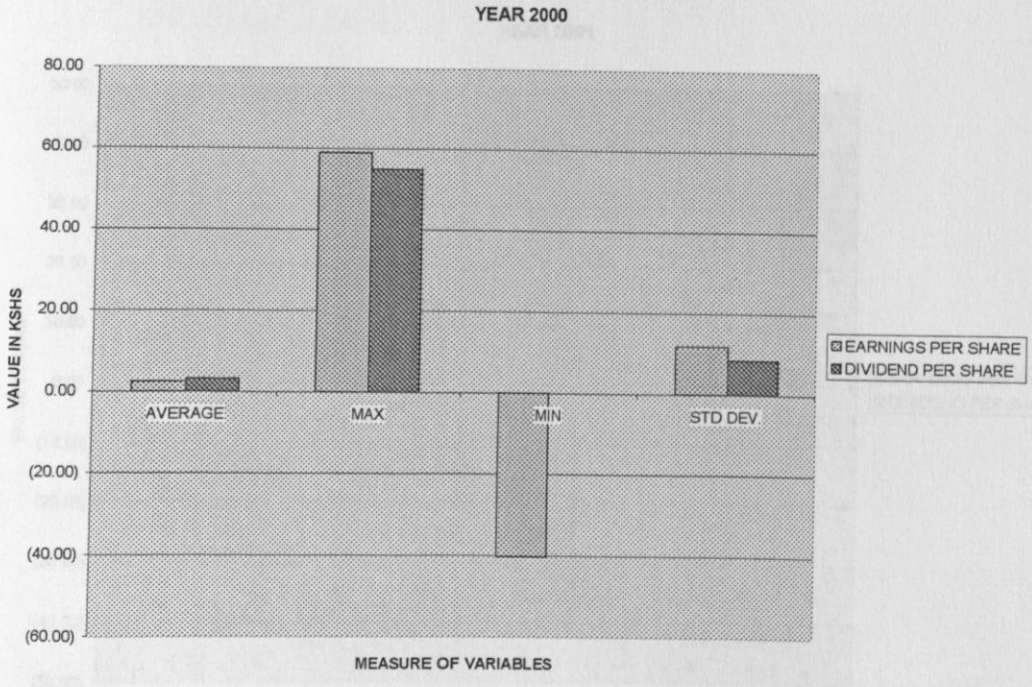
Figure 6 below, EPS and DPS have almost the same ranking of 59.12 and 55.00 meaning that there was less retention of the earnings, compared to the dividends paid in the year 2000 for all the companies quoted on the Nairobi Stock Exchange. The average value for DPS is Kshs 2.48 while the EPS is Kshs 3.16, and similar values for the other variable are shown in Table 9 below.

Table 9 Year 2000

YEAR 2000		
VARIABLE	**X-EPS**	**Y-DPS**
AVERAGE	2.48	3.16
MAX	59.12	55.00
MIN	(40.33)	0.00
STD DEV.	11.91	8.85

Source: NSE Handbook 2005 4th Edition

Figure 6 Variables for 2000



Source: NSE Handbook 2005 4th Edition

The bar graph above on Figure 6 represents Table 9, with the highest EPS and DPS having the values of Kshs 59.12 and Kshs 55.00 respectively.

4.1.7 Analysis for the year 2001

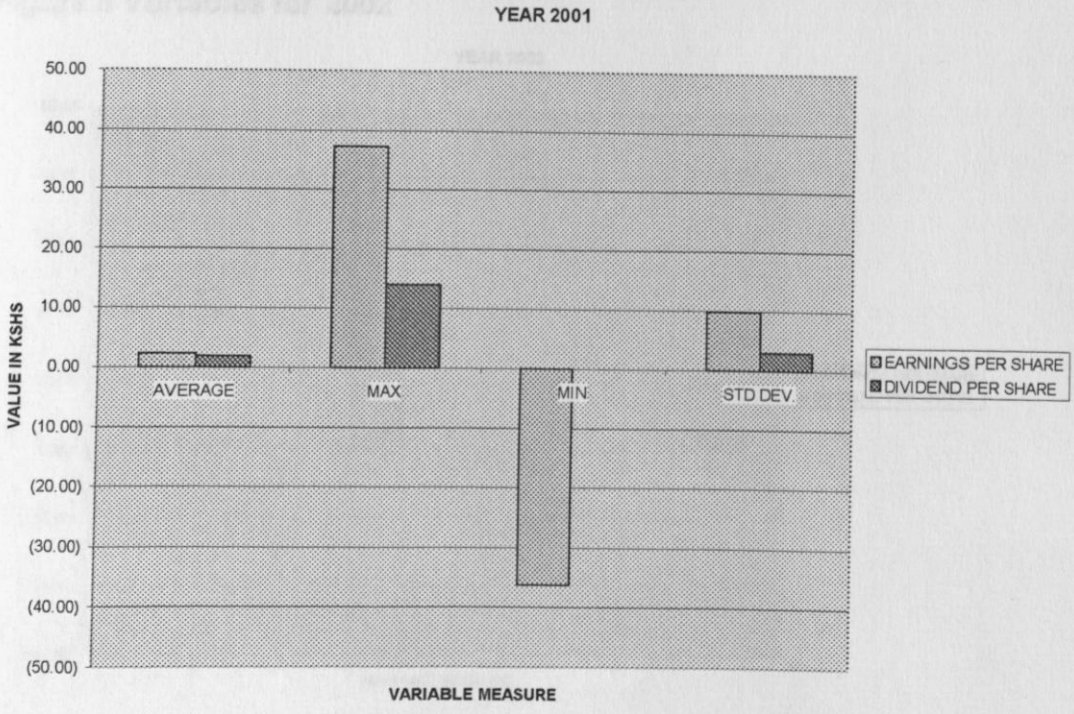
Figure 7 below and considering the max criterion, it is observed that the ratio of dividends distribution is very high compared to a maximum of Kshs 37.21 and Kshs 14.00 for EPS and DPS respectively for the year 2001. The highest DPS in the year 2001 was Kshs 14.00, while the average was Kshs 1.87. It is again observed that the Maximum EPS was Kshs 37.21 with the lowest been Kshs –36.36 as seen in Figure 10 below.

Table 10 Year 2001

YEAR 2001		
VARIABLE	**X-EPS**	**Y-DPS**
AVERAGE	3.32	1.87
MAX	37.21	14.00
MIN	(36.36)	0.00
STD DEV.	9.90	3.01

Source: NSE Handbook 2005 4th Edition

Figure 7 Variables for 2001



Source: NSE Handbook 2005 4th Edition

Figure 7 is visual representation of Table 10, which is represented in a bar graph.

4.1.8 Analysis for the year 2002

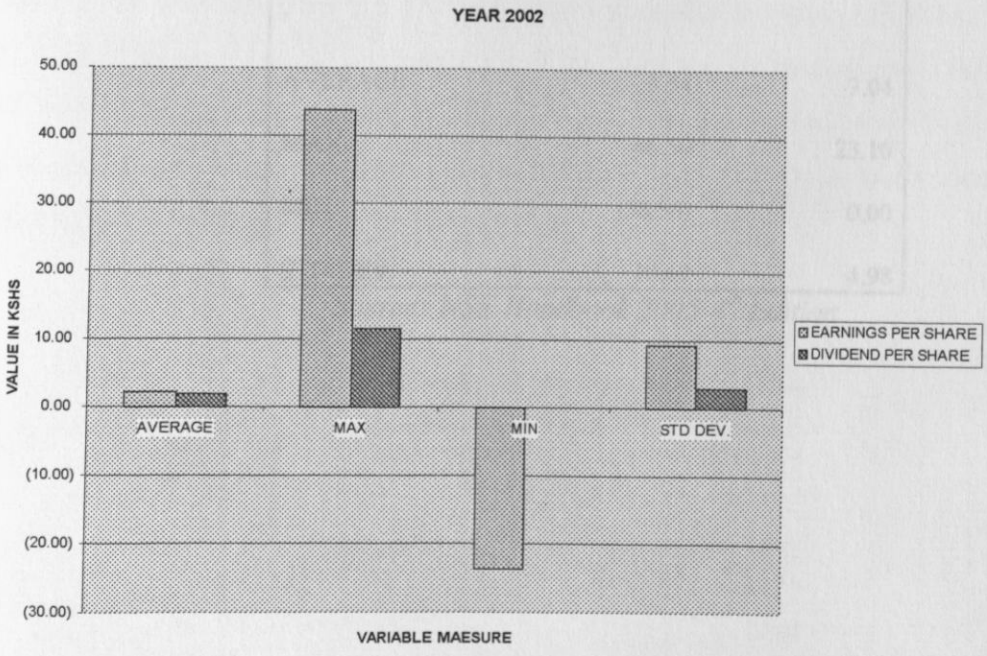
Figure 8 below and comparing the years 2002 and 2001 as shown in Figures 6 and 7 in the previous paragraphs, the retention level is higher meaning less dividends were distributed to the shareholders, and much of the earnings were retained hopefully for expansion purposes or future dividend payments. The maximum EPS has increased from Kshs 37.21 to Kshs 43.80 from year 2001 to 2002, while the minimum value has reduced to Kshs –23.75

Table 11 Year 2002

YEAR 2002		
VARIABLE	**X-EPS**	**Y-DPS**
AVERAGE	2.25	1.92
MAX	43.80	11.50
MIN	(23.75)	0.00
STD DEV.	9.29	2.94

Source: NSE Handbook 2005 4th Edition

Figure 8 Variables for 2002



Source: NSE Handbook 2005 4th Edition

The bar graph above in Figure 8 has been plotted from Table 11 and shows the variability between the two variables.

4.1.9 Analysis for the year 2003

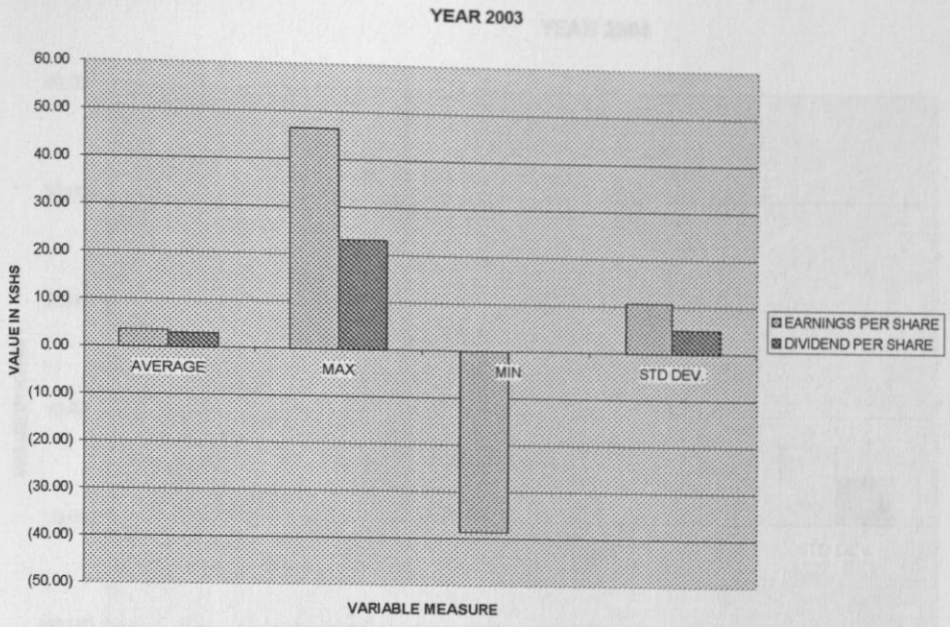
The spread between the EPS and the DPS has drastically reduced from Kshs 46.50 to Kshs 23.40; the implication is that more dividends were distributed to the shareholders as shown in Figure 9 below. It is observed that the EPS has further increased to Ksh 46.50 as compared to the previous three year. The minimum EPS has further reduced to Kshs -38.56 second highest value to Kshs -40.33 in the year 2000, for Kenya Power and Lighting Company Limited. In the year 2003 The Kenya Power and Lighting Company made a loss of Kshs 3,051,355 000 with an outstanding number of shares of 79,128,000

Table 12 Year 2003

YEAR 2003		
VARIABLE	**X-EPS**	**Y-DPS**
AVERAGE	3.54	3.04
MAX	46.50	23.10
MIN	(38.56)	0.00
STD DEV.	10.69	4.98

Source: NSE Handbook 2005 4th Edition

Figure 9 Variables for 2003



Source: NSE Handbook 2005 4th Edition

The graph above is reflection of the Table 12 above.

4.1.10 Analysis for the year 2004

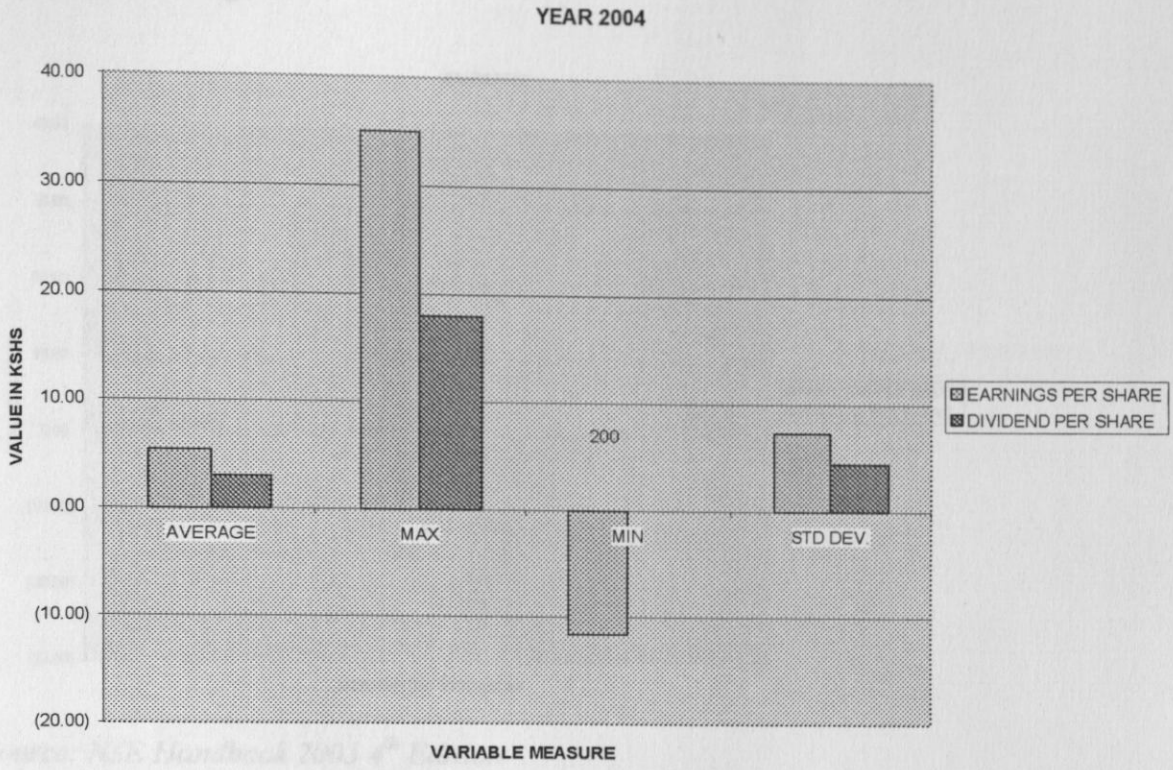
The trend between the retention of the earnings and dividend paid out to the shareholders is maintained with a higher EPS compared to the DPS. This is so since the payments of dividends may only be made from profits. The EPS is almost double the value of DPS of Kshs 35.05 and Kshs 18.00 respectively. The steady state of the firms are maintained and Table 13 shows that the EPS have the following values of Kshs 5.39, Kshs 35.05, Kshs –11.65 and Kshs 7.33 for averages, maximums, minimums and the standard deviations respectively; the corresponding values for DPS are clearly shown on Table 13

Table 13 Year 2004

YEAR 2004		
VARIABLE	**X-EPS**	**Y-DPS**
AVERAGE	5.39	3.01
MAX	35.05	18.00
MIN	(11.65)	0.00
STD DEV.	7.33	4.50

Source: NSE Handbook 2005 4th Edition

Figure 10 Variables for 2004



Source: NSE Handbook 2005 4th Edition

The height of the bar graph shows the values derived from table 13 above.

4.1.11 Analysis for the Average

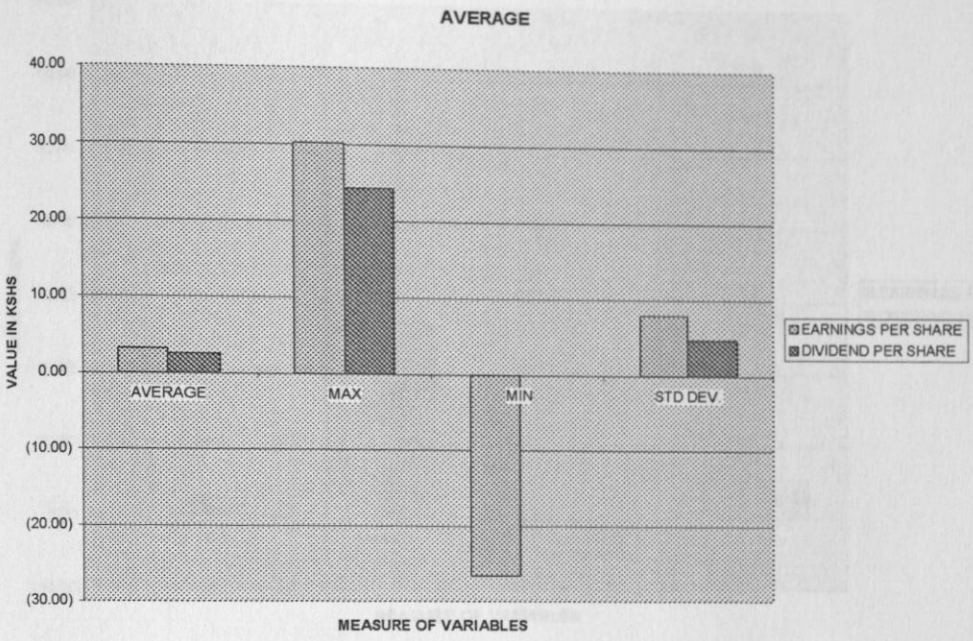
The two variables considered have a very close relationship, and by observing at the averages, maximums, minimums and the standard deviations; the variations for the four years under study are less than 10%. This table shows the average of all the variables considered in the study and it is observed that the highest EPS for the five years is Kshs 59.12 while the average of the minimums is Kshs –26.64

Table 14 Averages

AVERAGE		
VAIABLE	**X-EPS**	**Y-DPS**
Average	3.19	2.55
Maximum	30.20	16.00
Minimum	(26.64)	0.00
Std Dev.	8.01	3.85

Source: NSE Handbook 2005 4th Edition

Figure 11 Average



Source: NSE Handbook 2005 4th Edition

Figure 11 above shows the graphical representations of the averages.

4.1.12 Analysis for the Maximums

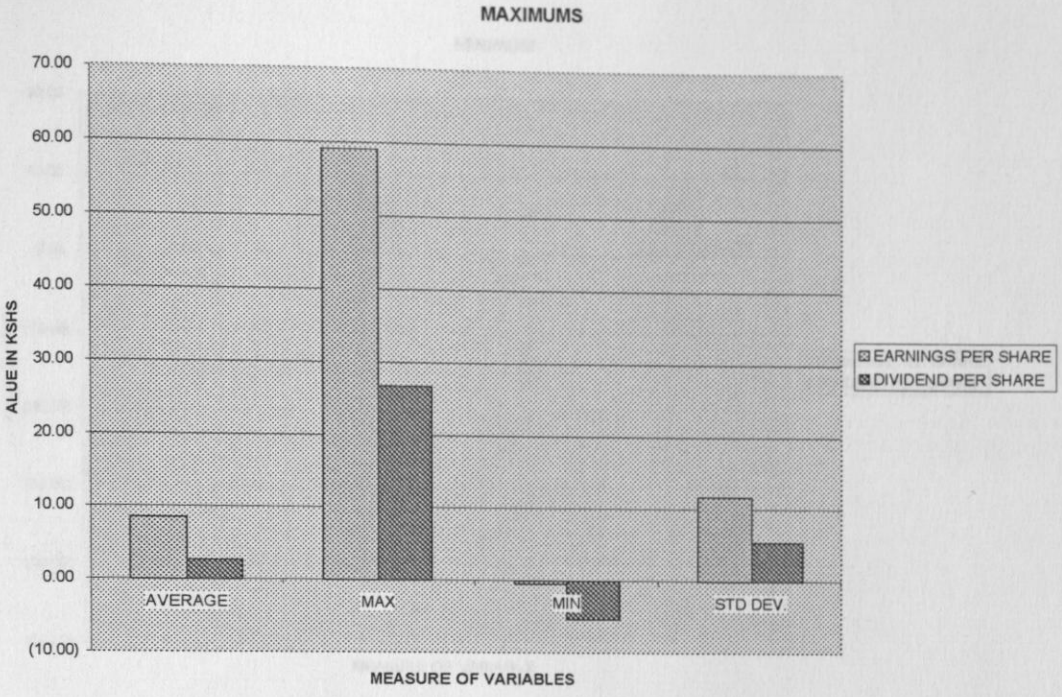
The variables are related in all respects by using maximum criterion as the benchmark. Table 15 below shows the maximums of each variable and notably to observe is the EPS of Kshs 59.12 while the DPS is Kshs 55.00 paid by Limuru Tea Company in the year 2000.

Table 15 Maximum

MAXIMUM		
VAIABLE	**Y-EPS**	**X-DPS**
Average	8.55	4.79
Maximum	59.12	55.00
Minimum	(0.43)	0.00
Std Dev.	8.92	9.19

Source: NSE Handbook 2005 4th Edition

Figure 12 Maximums



Source: NSE Handbook 2005 4th Edition

Notice the bar for EPS is the tallest with a value of 59.12

4.1.13 Analysis for the Minimums

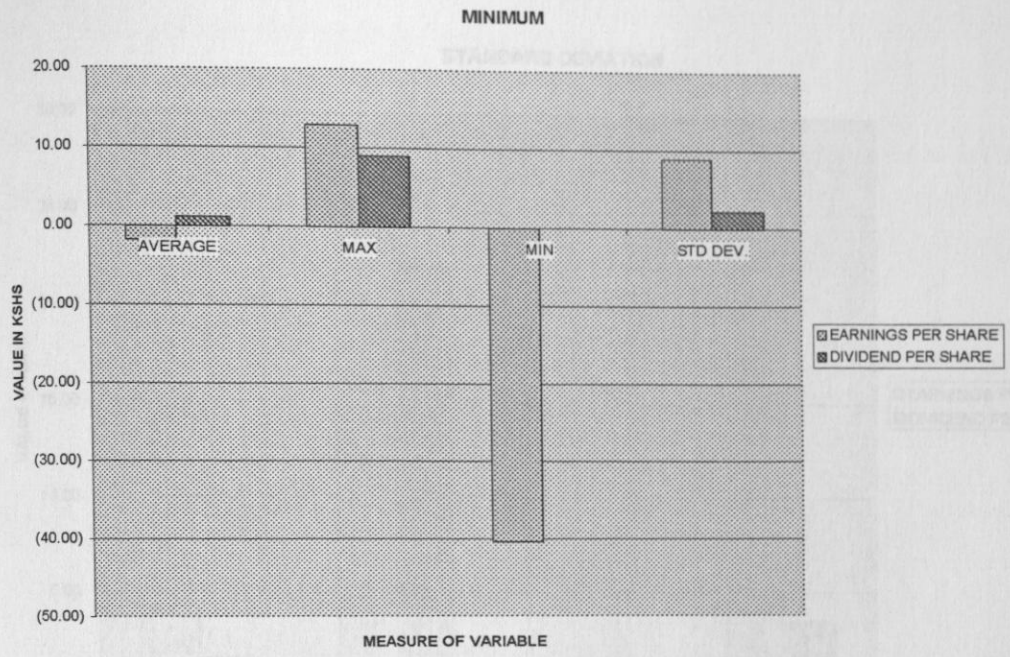
Using the minimum criterion as the basis for checking relationships, then the two variables have very close relationships as per Figure 13 below. The minimum EPS was Kshs –40.33 while the average was Kshs 1.84 with corresponding values of Kshs 9.00 and Kshs 1.17 respectively.

Table 16 Minimums

MINIMUM		
VAIABLE	Y-EPS	X-DPS
Average	1.84	1.17
Maximum	12.91	9.00
Minimum	(40.33)	0.00
Std Dev.	8.92	2.22

Source: NSE Handbook 2005 4th Edition

Figure 13 Minimums



Source: NSE Handbook 2005 4th Edition

It is observed the value for EPS is the longest below the X-axis shows the negative EPS of Kshs –40.33

4.1.14 Analysis for the Standard Deviations

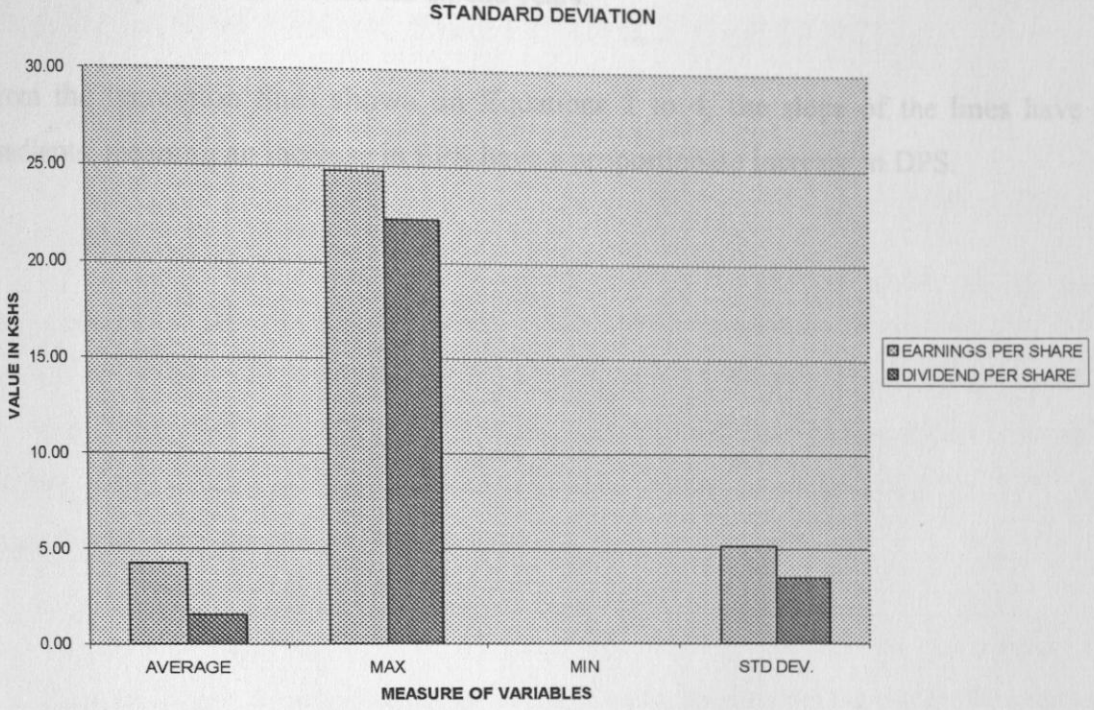
Just like the previous observations the two variables have retained close relationships as seen below on Figure 14. The variability between the values is measured by the Standard deviation and the is seen in table in Table 17 below with values of Kshs 4.26m, Kshs 24.76, Kshs 0.00 and Kshs 5.17 for average, maximums, minimums and standard deviations respectively.

Table 17 Standard Deviations

STANDARD DEVIATION		
VAIABLE	**Y-EPS**	**X-DPS**
Average	4.26	1.53
Maximum	24.76	22.26
Minimum	0.00	0.00
Std Dev.	5.17	3.50

Source: NSE Handbook 2005 4th Edition

Figure 14 Standard Deviations



Source: NSE Handbook 2005 4th Edition

It is observed that the values for maximums and minimums for the EPS and DPS are almost the same with values of Kshs 24.76 and Kshs 22.26 respectively.

4.2 Interpretation of Results

Its is observed in general that there is a very strong relationship between the two variables namely the Earnings Per Share (EPS) and the Dividend Per Share (DPS) as precisely observed from the analysis undertaken for years 2000 to 2004, the average, the maximums, the minimums, and the Standard Deviations shown and comparative equations from the table, graphs and charts in the preceding pages.

The highest dividend recorded and paid was Kshs 55.00 in year 2000 by Limuru Tea Company Limited, while the EPS was Kshs 59.12 in the year 2000. The profit made in the year 2000 was Kshs 11,824,000 with 200,000 outstanding numbers of shares.

Observations noted earlier indicates that The Kenya Power and Lighting Company Limited recorded the highest loss for the period under study with the highest loss EPS being Kshs -40.33, while paid no dividends for all the years.

From the regression lines shown on Equations 1 to 4, the slope of the lines have positive gradients, meaning an increase in EPS have a proportionate increase in DPS.

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 Summary of Findings and Conclusions

5.1.1 Summary of Findings

From this study, the averages for DPS is Kshs 2.55 of companies quoted on the NSE and for years 2000 to 2004, likewise the maximum DPS paid was Kshs 55.00 by Limuru Tea Company Limited. The equations showing the relationships between the two variables and for the various market segments have a positive coefficient, meaning an increase in EPS will have proportionate increase in the DPS.

It is evident that this study will be of great importance to the users in making very informed decisions on where, how and when to invest in order to earn the maximum benefits as may be needed, considering particularly the variables that have been researched on namely the Earnings Per Share (EPS) and the Dividend Per Share (DPS).

5.1.2 Conclusions

The challenging attitudes towards the role of the private sector in the development of African economies has been facilitated by the development of the stock market because of the inherent potential of these markets to meet the fixed capital needs of the private sector. Stock markets ensure the efficient and sustainable funding of governments, corporations and businesses for long-scale or long-term projects.

From this research it is evident that there is a very strong relationship between the Earnings Per Share and the Dividend Per Share; with the Earnings Per Share always having higher value(s) than the Dividend Per Share meaning that a company cannot distribute dividends to the shareholders more than what has been earned in terms of profits. The coefficients of the equations obtained are positive, meaning that an increase in the EPS will have a similar increase in the DPS, a significance that dividends must be paid from earnings of the company.

5.2 Limitations of the Study

Data was restricted to the companies quoted on the Nairobi Stock Exchange, since getting data from unlisted companies may not be reliable.

The study was restricted to the years 2000 to 2004, and that is when there was massive trading in the NSE as per Appendix 7, on The Time Series Data on the Key Market Indicators.

The period allocated to undertake the research project is very short, hence not able to exhaustively incorporate all the variables that would otherwise have been in enriching the quality of the project.

5.3 Recommendations to the Policy Makers

The research mainly focused on companies quoted on the NSE and was restricted to two variables the EPS and DPS and years 2000 to 2004 and based on these facts then the following are recommendations to the policy makers who include the CEO's and the administrators.

The dividend payment policy should be observed to maintain the investor confidence and hence growth of the organization (Petit 1977). Investors are risk averse and therefore reduction of dividends or stock splits should be avoided, as the organizations performances will not change the shareholders wealth. Shareholders should as much as possible be paid cash dividends (Copland, 1979). Transfer of money to the retained earnings should be done only when the shareholders have been paid the periodical steady dividends.

5.4 Suggestions for Further Readings

Since the research was carried out for the period 2000 to 2004 a lot changes may have taken place namely, the rate of technology has drastically increased; there is a high degree of computerization, more companies have been included to the list of listed companies and others have left trading at the stock exchange, the speed at which firms have been operating has increased hence a high level of expansion and, legislations have been modified with respect to the regulators and other administrative organizations.

Further researches therefore need to be done incorporating all the above aspects, which are very critical factors and therefore calls forth for the research on the following areas to be

undertaken, unlisted companies, are also investors and equally contribute to the development of the economy. I therefore suggest further research be carried with unlisted companies as a sample group; a similar study should be carried out after five years to access whether the factors considered have changed due to the economic, technology and global factors.

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APPENDICIES

Appendix 1 Nairobi Stock Exchange Primary Variables

	ANALYSIS OF THE VARIABLES	EARNINGS PER SHARE					DIVIDEND PER SHARE				
	COMPANY	2000	2001	2002	2003	2004	2000	2001	2002	2003	200
1	Unilever Tea Kenya Limited	9.19	4.57	2.54	1.27	7.39	6.00	2.00	2.50	6.00	8.0
2	Kakuzi Limited	(1.44)	(2.31)	0.39	(0.60)	4.27	0.40	0.00	0.00	0.00	1.0
3	Rea Vipingo Plantations Ltd	(0.57)	0.07	0.41	0.05	2.14	0.00	0.00	0.25	0.40	0.8
4	Sasini Tea and Coffee Limited	2.91	0.40	(0.18)	(1.77)	20.29	2.00	1.00	0.50	0.00	2.5
5	Car and General (Kenya) Ltd	(0.19)	(0.26)	0.33	2.72	1.64	0.00	0.00	0.00	0.67	0.6
6	CMC Holdings Limited	5.05	3.58	6.29	7.29	5.42	0.75	0.75	1.00	1.00	1.0
7	Hutchings Biemer Limited-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
8	Kenya Airways Limited	6.03	2.94	1.88	0.87	2.82	1.25	1.25	0.60	0.50	0.7
9	Marshalls (East Africa) Limited	(7.24)	(21.45)	2.03	1.53	1.55	0.00	0.00	0.00	0.00	0.0
10	Nation Media Group Limited	5.70	4.80	7.55	11.27	11.99	1.75	1.60	2.50	5.00	6.0
11	Tourism Promotion Services Ltd	2.15	2.50	2.74	0.65	3.37	1.10	1.10	1.10	1.10	1.1
12	Uchumi Supermarkets Limited	5.33	1.49	0.83	(3.28)	(11.65)	3.00	1.60	0.50	0.00	0.0
13	Barclays Bank of Kenya Ltd	11.20	16.00	9.60	16.50	18.10	10.00	14.00	9.00	14.00	14.0
14	CFC Bank	1.61	1.18	1.45	2.49	3.01	0.67	0.67	0.67	0.84	0.8
15	Diamond Trust Bank (K) Ltd	6.80	17.48	10.53	19.98	16.97	0.60	0.40	0.60	0.70	0.7
16	Housing Finance Company Ltd	0.45	(1.62)	0.49	0.45	0.52	0.38	0.00	0.00	0.00	0.0
17	ICDC Investment Company Ltd	5.92	3.35	4.48	2.89	4.39	3.00	2.00	2.00	2.20	3.0
18	Jubilee Insurance Company Ltd	2.17	3.37	4.57	5.91	7.68	1.75	1.75	1.75	2.25	2.5
19	Kenya Commercial Bank Ltd	(4.14)	1.31	(20.06)	3.25	3.94	0.00	0.00	0.00	1.00	2.0
20	National Bank of Kenya Limited	(11.03)	1.49	0.99	2.02	1.91	-	-	-	0.00	0.0
21	NIC Bank Limited	3.79	3.12	2.78	2.94	3.17	1.80	1.60	2.00	2.25	2.4
22	Pan Africa Insurance Co. Ltd	(1.36)	3.41	(0.33)	(0.49)	1.95	-	-	-	0.00	1.0
23	Standard Chartered Bank K Ltd	8.80	9.07	8.92	11.28	6.74	11.00	8.25	8.25	8.50	6.5
24	Athi-River Mining Limited	0.40	0.40	0.62	1.04	1.26	0.00	0.20	0.40	0.50	0.0
25	Bamburi Cement Company Ltd	0.80	2.01	3.38	2.94	4.73	0.75	1.12	3.50	2.80	6.1
26	British American Tobacco K Ltd	5.83	6.04	8.23	11.40	12.10	7.90	7.90	9.00	12.50	16.5
27	BOC Kenya Limited	3.83	3.84	5.40	7.82	8.20	3.55	3.55	4.35	4.35	4.5
28	Carbacid Investments Limited	9.77	3.97	4.93	7.81	7.99	2.75	2.75	2.30	23.10	4.0
29	Crown-Berger Kenya Limited	0.90	1.08	2.57	2.74	2.15	0.50	0.50	1.50	1.50	0.0
30	Olympic Capital Holdings Ltd	0.18	1.61	0.51	0.92	2.29	0.40	0.00	0.00	0.00	0.0
31	East African Cables Limited	1.50	0.79	(0.29)	0.46	6.11	1.10	1.10	0.50	1.00	3.5
32	East African Portland Cement Co.	(4.66)	8.18	1.37	2.51	(2.99)	0.00	1.00	1.50	1.75	1.7
33	East African Breweries Ltd	12.91	14.88	21.28	13.76	35.05	7.50	9.00	11.50	15.00	18.0
34	Sameer Africa Limited	1.05	1.20	0.83	0.56	0.99	1.00	1.00	1.00	0.50	1.0
35	Kenya Oil Company Limited	15.15	37.21	43.80	46.50	8.32	6.00	7.50	9.50	10.50	2.0
36	Mumias Sugar Company Ltd	0.00	0.95	0.13	(0.42)	1.55	0.00	0.71	0.10	0.00	1.1
37	Kenya Power and Lighting Co. Ltd	(40.33)	(36.36)	(23.75)	(38.56)	5.79	2.00	0.00	0.00	0.00	0.0
38	Unga Group Limited	3.69	(2.23)	2.31	3.10	3.34	0.00	0.00	1.70	2.50	2.5
39	A. Baumann & Company Ltd	(9.81)	(2.20)	(1.07)	(0.43)	(1.62)	0.00	0.00	0.00	0.00	0.0
40	Eaagads Limited	(1.33)	0.12	0.48	(0.53)	(0.18)	0.00	0.50	0.50	0.00	0.0
41	Express Kenya Limited	(1.24)	(6.55)	(11.67)	(14.20)	0.14	0.00	0.00	0.00	0.00	0.0
42	Kapchorua Tea Company Ltd	3.80	1.60	(3.54)	8.90	9.88	2.50	2.50	0.50	3.75	3.7
43	Kenya Orchards Limited	(0.02)	0.00	0.07	(0.89)	(1.24)	0.00	0.00	0.00	0.00	0.0
44	Limuru Tea Company Ltd	59.12	(4.97)	3.46	13.41	16.10	55.00	0.00	3.00	10.00	15.0
45	Standard Group Limited	(7.33)	4.90	(0.94)	(0.76)	1.19	0.00	0.00	0.00	0.00	0.0
46	Williamson Tea Kenya Ltd	8.93	15.56	(3.07)	7.35	9.18	2.50	5.00	0.50	3.75	3.7

Source: NSE Handbook 2005 4th Edition

Appendix 2 Nairobi Stock Exchange Seondary Variables

	ANALYSIS OF THE VARIABLES	EARNINGS PER SHARE				DIVIDEND PER SHARE			
	COMPANY	AVERAGE	MAX	MIN	STD DEV.	AVERAGE	MAX	MIN	STD DEV.
1	Unilever Tea Kenya Limited	4.99	9.19	1.27	3.29	4.90	8.00	2.00	2.56
2	Kakuzi Limited	0.06	4.27	(2.31)	2.56	0.28	1.00	0.00	0.44
3	Rea Vipingo Plantations Ltd	0.42	2.14	(0.57)	1.02	0.29	0.80	0.00	0.33
4	Sasini Tea and Coffee Limited	4.33	20.29	(1.77)	9.08	1.20	2.50	0.00	1.04
5	Car and General (Kenya) Limited	0.85	2.72	(0.26)	1.29	0.27	0.67	0.00	0.37
6	CMC Holdings Limited	5.53	7.29	3.58	1.39	0.90	1.00	0.75	0.14
7	Hutchings Biemer Limited-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Kenya Airways Limited	2.91	6.03	0.87	1.93	0.87	1.25	0.50	0.36
9	Marshall (East Africa) Limited	(4.72)	2.03	(21.45)	10.13	0.00	0.00	0.00	0.00
10	Nation Media Group Limited	8.26	11.99	4.80	3.24	3.37	6.00	1.60	2.01
11	Tourism Promotion Services Ltd	2.28	3.37	0.65	1.02	1.10	1.10	1.10	0.00
12	Uchumi Supermarkets Limited	(1.46)	5.33	(11.65)	6.47	1.02	3.00	0.00	1.29
13	Barclays Bank of Kenya Limited	14.28	18.10	9.60	3.67	12.20	14.00	9.00	2.49
14	CFC Bank	1.95	3.01	1.18	0.77	0.74	0.84	0.67	0.09
15	Diamond Trust Bank (Kenya) Ltd	14.35	19.98	6.80	5.48	0.60	0.70	0.40	0.12
16	Housing Finance Company Ltd	0.06	0.52	(1.62)	0.94	0.08	0.38	0.00	0.17
17	ICDC Investment Company Ltd	4.21	5.92	2.89	1.17	2.44	3.00	2.00	0.52
18	Jubilee Insurance Company Ltd	4.74	7.68	2.17	2.15	2.00	2.50	1.75	0.35
19	Kenya Commercial Bank Limited	(3.14)	3.94	(20.06)	9.98	0.60	2.00	0.00	0.89
20	National Bank of Kenya Limited	(0.92)	2.02	(11.03)	5.66	0.00	0.00	0.00	0.00
21	NIC Bank Limited	3.16	3.79	2.78	0.38	2.01	2.40	1.60	0.32
22	Pan Africa Insurance Company Ltd	0.64	3.41	(1.36)	1.98	0.50	1.00	0.00	0.71
23	Standard Chartered Bank Kenya Ltd	8.96	11.28	6.74	1.61	8.50	11.00	6.50	1.61
24	Athi-River Mining Limited	0.74	1.26	0.40	0.39	0.22	0.50	0.00	0.23
25	Bamburi Cement Company Limited	2.77	4.73	0.80	1.47	2.86	6.12	0.75	2.15
26	British American Tobacco K Ltd	8.72	12.10	5.83	2.93	10.76	16.50	7.90	3.72
27	BOC Kenya Limited	5.82	8.20	3.83	2.10	4.06	4.50	3.55	0.47
28	Carbacid Investments Limited	6.89	9.77	3.97	2.38	6.98	23.10	2.30	9.03
29	Crown-Berger Kenya Limited	1.89	2.74	0.90	0.85	0.80	1.50	0.00	0.67
30	Olympic Capital Holdings Ltd	1.10	2.29	0.18	0.85	0.08	0.40	0.00	0.18
31	East African Cables Limited	1.71	6.11	(0.29)	2.54	1.44	3.50	0.50	1.18
32	East African Portland Cement Co.	0.88	8.18	(4.66)	5.05	1.20	1.75	0.00	0.74
33	East African Breweries Ltd	19.58	35.05	12.91	9.26	12.20	18.00	7.50	4.31
34	Sameer Africa Limited	0.93	1.20	0.56	0.24	0.90	1.00	0.50	0.22
35	Kenya Oil Company Limited	30.20	46.50	8.32	17.36	7.10	10.50	2.00	3.34
36	Mumias Sugar Company Ltd	0.44	1.55	(0.42)	0.79	0.38	1.10	0.00	0.50
37	Kenya Power and Lighting Co. Ltd	(26.64)	5.79	(40.33)	19.26	0.40	2.00	0.00	0.89
38	Unga Group Limited	2.04	3.69	(2.23)	2.44	1.34	2.50	0.00	1.27
39	A. Baumann & Company Ltd	(3.03)	(0.43)	(9.81)	3.85	0.00	0.00	0.00	0.00
40	Eaagads Limited	(0.29)	0.48	(1.33)	0.69	0.20	0.50	0.00	0.27
41	Express Kenya Limited	(6.70)	0.14	(14.20)	6.28	0.00	0.00	0.00	0.00
42	Kapchorua Tea Company Ltd	4.13	9.88	(3.54)	5.50	2.60	3.75	0.50	1.33
43	Kenya Orchards Limited	(0.42)	0.07	(1.24)	0.61	0.00	0.00	0.00	0.00
44	Limuru Tea Company Ltd	17.42	59.12	(4.97)	24.76	16.60	55.00	0.00	22.26
45	Standard Group Limited	(0.59)	4.90	(7.33)	4.44	0.00	0.00	0.00	0.00
46	Williamson Tea Kenya Ltd	7.59	15.56	(3.07)	6.74	3.10	5.00	0.50	1.70

Source: NSE Handbook 2005 4th Edition

Appendix 3 List of companies quoted on the NSE 20 Index, as at 31st December 2004.

NAIROBI STOCK EXCHANGE

THE MAIN INVESTMENT MARKET SEGMENT (MIMS)

AGRICULTURE

1 Unilever Tea Kenya Limited
2 Kakuzi Limited
3 Rea Vipingo Plantations Ltd
4 Sasini Tea and Coffee Limited

COMMERCIAL AND SERVICES

5 Car and General (Kenya) Limited
6 CMC Holdings Limited
7 Hutchings Biemer Limited-
8 Kenya Airways Limited
9 Marshalls (East Africa) Limited
10 Nation Media Group Limited
11 Tourism Promotion Services Limited
12 Uchumi Supermarkets Limited

FINANCE AND INVESTMENT

13 Barclays Bank of Kenya Limited
14 CFC Bank
15 Diamond Trust Bank (Kenya) Limited
16 Housing Finance Company Limited
17 ICDC Investment Company Limited
18 Jubilee Insurance Company Limited
19 Kenya Commercial Bank Limited
20 National Bank of Kenya Limited
21 NIC Bank Limited
22 Pan Africa Insurance Company Limited

23 Standard Chartered Bank Kenya Limited

INDUSTRIAL AND ALLIED

24 Athi-River Mining Limited

25 Bamburi Cement Company Limited

26 British American Tobacco Kenya Limited

27 BOC Kenya Limited

28 Carbacid Investments Limited

29 Crown-Berger Kenya Limited

30 Olympic Capital Holdings Limited – Formerly Dunlop Kenya

31 East African Cables Limited

32 East African Portland Cement Company

33 East African Breweries Limited

34 Sameer Africa Limited (formerly- Firestone East Africa (1969) Limited)

35 Kenya Oil Company Limited

36 Mumias Sugar Company Ltd

37 Kenya Power and Lighting Company Limited

38 Unga Group Limited

ALTERNATIVE INVESTMENT MARKET SEGMENT (AIMS)

39 A. Baumann & Company Limited

40 Eaagads Limited

41 Express Kenya Limited

42 Kapchorua Tea Company Limited

43 Kenya Orchards Limited

44 Limuru Tea Company Limited

45 Standard Group Limited

46 Williamson Tea Kenya Limited

FIXED INCOME SECURITY MARKET SEGMENT (FISMS)

47(a) Kenya Power and Lighting Company Limited 4% Preference

47(b) Kenya Power and Lighting Company Limited 7% Preference

Source: NSE Handbook 2005 4th Edition

Appendix 4 NSE 20-Shares Index High and Low figures for the years 1971 to 2004.

YEAR	INDEX HIGH	MONTH	INDEX LOW	MONTH
1971	257.80	November	205.70	January
1972	264.00	June	230.50	October
1973	261.20	September	227.00	December
1974	243.60	March	174.30	December
1975	206.20	December	166.40	July
1976	229.40	December	187.30	July
1977	391.00	December	228.60	January
1978	441.80	August	396.10	January
1979	416.30	January	333.00	February
1980	385.80	September	352.80	January
1981	381.20	January	350.40	December
1982	359.70	July	343.50	October
1983	382.70	December	351.40	January
1984	386.60	November	383.00	January
1985	421.10	December	386.00	February
1986	506.00	December	423.20	January
1987	735.30	December	506.70	January
1988	858.40	December	751.68	January
1989	825.10	December	862.70	January
1990	930.60	November	799.53	February
1991	976.04	April	904.17	February
1992	1,098.07	November	941.18	January
1993	2,532.49	December	1,135.97	January
1994	5,137.08	February	2,533.89	January
1995	4,545.51	January	2,844.90	October
1996	3,449.66	January	2,897.43	April
1997	3,675.44	January	3,029.00	November
1998	3,388.56	January	2,510.77	November
1999	3,126.58	January	2,274.94	November
2000	2,313.75	January	1,832.50	December
2001	1,936.11	March	1,343.81	December
2002	1,382.77	January	1,004.70	September
2003	1,384.98	January	2,742.30	December
2004	3,183.95	March	2,567.69	May

Source: NSE Handbook 2005 4th Edition

Appendix 5 Top Ten companies by Market Capitalization (in Kshs) as at 31st Dec 2004

No.	SECURITY	NUMBER OF ISSUED SHARES	SHARE PRICE AS AT 31/12/2004	MARKET CAPITALIZATION AS AT 31/12/2004
1	East African Breweries Ltd.	658,979,900	100.00	65,897,990,000
2	Barclays Bank (K) Ltd.	203,682,600	200.00	40,736,520,000
3	Bamburi Cement Ltd.	362,959,025	95.00	34,481,107,375
4	Standard Chartered Bank Ltd.	271,243,464	122.00	33,091,702,608
5	British American Tobacco (K) Ltd.	100,000,000	200.00	20,000,000,000
6	Kenya Commercial Bank Ltd.	149,600,000	64.00	9,574,400,000
7	Nation Media Group Ltd.	53,478,945	170.00	9,091,420,650
8	CFC Bank Ltd.	144,000,000	58.00	8,352,000,000
9	Kenya Airways Ltd	461,615,484	16.90	7,801,301,680
10	Kenya Power & Lighting Ltd.	79,128,000	94.50	7,477,596,000

Source: NSE Handbook 2005 4th Edition

Appendix 6 Companies that constitute the Calculation of NSE 20 Share Index

No.	Company Name
• 1.	Unilever Tea Kenya Limited
• 2.	Williamson Tea Kenya Limited
• 3.	Kakuzi Limited
• 4.	Sasini Tea and Coffee Limited
• 5.	Uchumi Supermarket
• 6.	Kenya Airways Limited
• 7.	TPS-Serena
• 8.	Nation Media Group
• 9.	Barclays Bank (K) Limited
• 10.	Diamond Trust Bank Kenya Limited
• 11.	Kenya Commercial Bank Limited
• 12.	Standard Chartered Bank Limited
• 13.	Bamburi Cement Limited
• 14.	British American Tobacco (K) Limited
• 15.	British Oxygen Company Kenya Limited
• 16.	National Industrial Credit Bank Limited*
• 17.	East Africa Breweries Limited
• 18.	Firestone East Africa Ltd
• 19.	Kenya Power & Lighting Company Limited
• 20.	Total Kenya Limited

Source: NSE Handbook 2005 4th Edition

Appendix 7 Time Series Data for Key Market Indicators

Key Market Indicators	1991	1992	1993	1994	1995	1996	1997
N.S.E Index	958.29	1,167.29	2,513.74	4,559.40	3,468.88	3,114.11	3,115.14
Market Capitalization (Kshs Billion)	12.71	23.06	72.39	136.83	112.88	99.95	114.31
Shares Traded (thousand)	16,648	14,811	27,292	42,758	59,385	113,559	143,584
Shares Outstanding (million)	668	745	891	1,585	1,801	2,531	2,965
Turnover ratio (shares)%	2.49	1.99	3.06	2.70	3.30	4.49	4.84
Value of shares Traded (million)	302	385	824	3,076	3,345	3,962	6,149
Number of Transactions (sales)	8,742	12,020	17,885	39,581	54,280	63,304	80,546
Av. Value per Transaction	34,490.87	31,994.38	46,089.23	77,717.99	61,630.46	62.6	76.3

Key Market Indicators	1998	1999	2000	2001	2002	2003	2004
N.S.E Index	2,962.06	2,303.18	1,913.35	1,355.05	1,362.85	2,737.59	2,945.58
Market Capitalization (Kshs Billions)	129.02	106.74	101.42	86.1	112.59	317.89	306.02
Shares Traded (thousand)	111,511	157,487	141,648	109,191	148,836	381,230	625,328
Shares Outstanding (millions)	3,303	3,360	3,646	4,354	4,380	4,249	5,097
Turnover ratio (shares)%	3.38	4.69	3.88	2.51	3.40	8.97	12.27
Value of shares Traded (Millions)	4,583	5,158	3,632	3,121	2,921	15,251	22,324
Number of Transactions (Sales)	54,925	45,887	32,908	28,225	25,051	91,889	124,793
Av. Value per Transaction (000)	83.5	112.4	110.4	110.1	116.61	165.97	178.89

Source: NSE Handbook 2005 4th Edition

Appendix 8 Top Ten Companies by Turnover (in Kshs) as at December 2004

	Company	Turnover
1	EABL	399328364
2	Mumias Sugar	162653328
3	Barclays Bank	128952126
4	KPLC	80204916
5	KCB	76217811
6	BAT	69724804
7	NMG	54983619
8	Bamburi Cement	51691163
9	Uchumi Supermarket	46900138
10	Pan Africa Ins. Holdings	43315040

Source: NSE Handbook 2005 4th Edition

Appendix 9 Letter of introduction from the University of Nairobi

UNIVERSITY OF NAIROBI
FACULTY OF COMMERCE
MBA PROGRAM – LOWER KABETE CAMPUS

Telephone: 732160 Ext. 208
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE...Wednesday, June 07, 2006.....

TO WHOM IT MAY CONCERN

The bearer of this letter **HUMPHREY MULINGE MUINDI**.....

Registration No: .....**D/61/P/7249/04**.....

is a Master of Business Administration (MBA) student of the University of Nairobi.

He/she is required to submit as part of his/her coursework assessment a research project report on some management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate if you assist him/her by allowing him/her to collect data in your organization for the research.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

M.B.A. OFFICE * P. O. Box 30197, NAIROBI * UNIVERSITY COMMERCE FACULTY

JACKSON MAALU
CO-ORDINATOR, MBA PROGRAM