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**A STUDY ON DIVIDEND POLICIES, GROWTH IN ASSETS, RETURN ON
ASSETS AND RETURN ON EQUITY AT THE NAIROBI STOCK
EXCHANGE.** //

**EAST AFRICANA COLLECTION
UNIVERSITY OF NAIROBI
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By

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**MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER
OF BUSINESS AND ADMINISTRATION, FACULTY OF COMMERCE,
UNIVERSITY OF NAIROBI**

OCTOBER 2000

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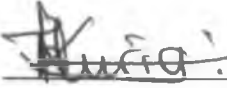
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DECLARATION

This project is my original work and has not been submitted for a degree in any other university.

Signed



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

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ACKNOWLEDGEMENT

I would first and foremost like to thank God for giving me this opportunity to pursue an MBA. May all Glory and Honour be Yours.

I would also like to extend my sincere gratitude to my supervisor whose guidance, patience, keen interest and effort was crucial to the completion of this project.

My parents, James and Lucy to whom I will always be indebted also contributed a lot and I want to thank them sincerely.

Lastly to my brothers, Chege and Kuria I am clearing the way

GOD BLESS YOU ALL

ABSTRACT

This study investigates the relationship between dividend policy and return on assets, return on equity and growth in assets. The study relies on companies quoted at the Nairobi stock Exchange to bring out the relationship between dividend policy and return on assets, return on equity and growth in assets.

The analysis reveals that companies like Limuru Tea Co. Ltd, Brooke Bond, ICDC Investment, BAT Kenya and NIC Bank have maintained a very high dividend payout ratio throughout the period of study. Some companies also paid out dividends from the previous years profits like Kapchorua Tea Company in 1994. Certain companies did not payout any dividends throughout the period of study, such as Kenya orchards Ltd.

The additional findings are that,

- (i) The relationship between dividend payout and return on equity is not significant. However in 1998 the relationship was found to be significant.
- (ii) The relationship between dividend payout ratios and return on assets reveals that return on assets is significant. A possible interpretation is that manager's look at return on assets in determining dividend payout ratios.
- (ii) The relationship between average growth in assets and dividend payout ratio is not significant. However in 1995 the relationship was significant.

From the findings the dividend payout ratios, return on assets, return on equity and growth in assets have been decreasing over the period of study which may suggest that managers are not necessarily using retained earnings to generate greater returns for shareholders.

1.0 CHAPTER ONE; INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

Dividend policy is an unresolved issue in finance. Dividend policy is about the division of earnings between payments to shareholders and re-investments in the firm. Furthermore retained earnings still remain one of the most significant sources of finance for corporations. For example, over half of companies quoted at NSE rely on retained earnings to finance growth.

This study will seek to find out whether there is any assignable evidence that internal investment is affected by dividend levels, and specifically whether company's growth depends on dividend levels.

This study relies on two widely used measures of performance to try and assess whether managers use retained earnings to generate greater returns: this measures are the return on assets and return on equity. The growth in assets over the period of study, 1991 - 1998, will also be observed to see whether manager's decision to use retained earnings results in asset growth.

Return on assets measures how well managers' use or employ assets at their disposal to generate profits or greater returns. Also the return on assets is a measure of operating efficiency of the total business. Which means that the return on assets is based on the number of times the assets are turnover into sales or the extent to which the assets are used to generate sales and how profitable the sales are. This also means that return on assets is tied to return on equity. Every shilling, therefore tied up in assets (investments) results in a

lower return on assets, because this ratio measures the number of times assets are turned over into sales. Therefore, a higher return on assets (return on investments) results in a larger return or profit, hence a rewarding use of retained funds to shareholders.

Ordinary shareholders are entitled to the residual profits. The rate of dividends is not fixed; the earnings may be distributed to shareholders or retained in the business. Nevertheless, the net profits after taxes represents their return. A return on shareholders, equity is calculated to see the profitability of owner's investment. Return on equity indicates how well the firm has used the resources of the owners. It indicates the cost at which a business will raise funds needed to finance worthwhile projects and an attractive return on equity will enable a firm to raise funds that it needs to finance its growth at relatively affordable costs. The net results are greater profits and growth in the wealth of those who invest in the business.

Although this study relies on these ratios, they should be used with caution. Ratios are constructed from accounting data, and these data are subject to different interpretation and even to manipulation. For example, two firms may use different depreciation methods or inventory valuation methods; depending on the procedures followed, reported profits can be raised or lowered.

It is possible that managers consider a number of factors when determining the amount of earnings to pay as dividends¹. Legal rules have emerged concerning dividend payments.

The net profits rule provides that dividends can be paid from past and present earnings. The capital impairment rule protects creditors by prohibiting the payment of dividends from capital. The insolvency rule provides that companies cannot legally pay dividends while insolvent. These rules provide guidelines on distribution of earnings.

A firm with good earnings may not be able to pay cash dividends if its cash position is unhealthy. It may make economic sense repaying debt than paying dividends.

Debt contracts frequently restrict a firm's ability to pay cash dividends. Such restrictions are designed to protect the position of the lenders.

The more rapidly a firm is growing the greater its need for financing asset expansion. The greater the future need for funds, the more likely the firm is to retain earnings rather than pay them out.

¹Western J F and Copeland R.E 1992 Managerial Finance 9th edition. The Dryden Press. PP 553 - 556.

A firm that has relatively stable earnings is often able to predict approximately what its future earnings will be. Such a firm is likely to pay out a higher percentage of its earnings than is a firm with fluctuating earnings.

A large, well-established firm with a record of profitability and stability of earnings has easy access to capital markets and other forms of external financing. A small and new firm may find it difficult raising funds from the investing public.

Sources of financing on the control situation in the firm are an important consideration. On selling additional ordinary shares to other investors the control in the company is diluted. At the same time selling debt increases the risks of fluctuating earnings to the present owners of the company. Reliance on internal financing in order to maintain control reduces the dividend payout and financial risk.

Dividends are taxable on the hands of shareholders. High tax paying investors may prefer capital gain to dividends

1.2 Statement of the Problem

Smith², (1990) wondered why corporations pay dividends and further more why investors pay attention to dividends. Why do corporations pay dividends? Why do investors pay attention to dividends?

² Smith, G.W. 1990.Modern theory of Corporate Finance,2nd edition; MC Graw-Hill,USA.

Dividends are the return to the investors who put their money at risk in the corporation. Corporations pay dividends to reward existing shareholders and to encourage others to invest. Investors pay attention to dividends because it signifies a return on their investment. Dividend enable them sell shares at better prices or to sell their shares at a higher price in the future.

A corporation that pays no dividends is demonstrating confidence that it has attractive investment opportunities that might be missed if it paid dividends. If it makes these investments, such a firm may increase the value of the shares by more than the amount of the lost dividends. In which case its shareholders may be undoubtedly better off.

This study seeks to find out if there is any assignable evidence that dividend levels affect internal investment and specifically if company's growth depends on dividend levels. An attempt to establish whether there is any relationship between the dividend levels and total assets growth is made. Is it that a company that retains its profit has higher growth in terms of internal investments? The value of the firm also will be affected by dividend policy according to Walter's model (1963) and hence a link should also be established between dividend policy and the return on assets and equity of the company. This study will also try to establish that dividend payout is a residue decision, i.e. a firm will only payout dividends only after it has invested in all other profitable ventures and there is still some earnings or profit left.

1.3 Objectives of the study

- 1 Identify the different dividend payout ratios adopted by different firms.
- 2 To establish the relationship between dividend payout ratios and growth in assets.
- 3 To establish the relationship between dividend payout ratios and return on assets.
- 4 To establish the relationship between dividend payout ratios and return on equity.

1.4 Importance of the study

The study will help to establish whether indeed dividend levels affect the internal investments of companies. It will also help to establish whether most companies seek to maintain a target dividend per share. This will help managers to understand the dividend policies adopted by similar firms in the same industry and even by the different firms quoted at the Nairobi Stock of exchange. Potential investors will also be able to identify firms that are able to generate higher returns or those firms that use their retained earnings well in order to generate higher returns for their shareholders.

2.0 CHAPTER TWO: LITERATURE REVIEW

Different theories have been advanced explaining dividend policy.

These theories can be grouped into two categories;

- a) There are theories which consider dividend decision to be relevant and
- b) Theories that consider dividend decision to be irrelevant.

Dividend Relevance (Gordon & Linter, 1962)

Walter (1963) argues that the choice of dividend policies affect the value of the return on assets². He concludes that the dividend policy of the firm depends on the availability of investment opportunities (See appendix 3).

The relationship between the firm's internal rate of return, r , and its cost of capital, K is critical in setting the amount to be paid as dividends. His advice is that firms should retain all earnings when, $r > K$; distribute all earnings when $r < K$; and that dividend (or retention) policy has no effect when $r = K$.

Walter's model (see appendix 1) is a financing decision. When dividend policy is treated as a financing decision, the payment of cash dividends is a passive residual.³

² Walter, James E., Dividend policy: Its influence on the value of the enterprise, Journal of finance 1963, P.280 - 291.

³ Solomon, Ezra, The Theory of financial Management, Columbia Press, PP.139 - 40

The model mixes dividend policy with investment policy of the firm. The model assumes that retained earnings only and no external financing finance the investment opportunities of the firm. Debt or equity - is used for the purpose. When such a situation exists, either the firm's investment or dividend policy or both will be sub-optimum.

This only further asserts that whether the firm uses retained earnings or debt to finance internal investments then the firm must earn on their investments rates greater than the minimum rate required by investors, other wise investors would like earnings to be distributed to them so that they may spend it or invest elsewhere to get a rate higher than earned by the declining firm. The wealth of the owners will be maximised only when this optimum investment is made. The wealth of the owners can be maximised if there is an increase in the market value of a firm and also if there is a growth in the assets.

This study will establish whether there is a link between dividend policy and growth in assets of publicly quoted companies.

Gordon's model (Gordon, 1962)

Developed by Myron Gordon (1962). According to Gordon's dividend-capitalization model (1962), the market value of a share is equal to the present value of an infinite stream of dividends to be received by the shareholders.

$$\text{Thus } P^0 = \frac{\text{Div}_1}{(1+k)^1}$$

When we incorporate growth in earnings, resulting from retained earnings, the present value of the firm is;

$$P = \frac{\text{Div}_1}{K-g}$$

However, the dividend per share is expected to grow when earnings are retained. The dividend per share is equal to the payout ratio, $(1-b)$, times earnings, i.e $\text{Div}_1 = (1-b) \text{EPS}_1$, where b is the fraction of retained earnings. The retained earnings are assumed to be reinvested within the all-equity firm at a rate of return of r . This allows earnings to grow at the rate of $g=br$ per period.

This model further asserts that dividend policy is relevant, but all the same does not serve to answer whether the internal investments of firm is affected by dividend policy. This should be of particular interest because most companies retain earnings, but do their assets grow at the same rate? But the model asserts that as a company retains earnings then its value should increase over time.

The bird- in- the hand argument (Krishman, 1933)

According to Gordon's model (1962), dividend policy is irrelevant where $r=K$, when all other assumptions are held valid. He also concludes that dividend policy does affect the value of a share even when $r=k$. This view is based on the assumption, that under conditions of uncertainty, investors tend to discount

distant dividends (capital gains) at a higher rate than they discount near dividends. Investors, behaving rationally, are risk-averse and therefore, have a preference for near dividends to future dividends. The logic underlying the dividend effect on the share value can be described as the bird-in-hand argument. Kirshman (1933) put the bird-in-the -hand argument forward, first of all, in the following words;" Of two stocks with identical earnings record, and prospects but one paying a larger dividend than the other, the former will undoubtedly command a higher price merely because stockholders prefer present to future values. Myopic vision plays a part in the price-making process. Stockholders often act upon the principle that a bird in the hand is worth two in the bush and for this reason are willing to pay a premium for the stock with the higher dividend rate, just as they discount the one with the lower rate⁴.

Myron Gordon (1963) has expressed the bird-in -the-hand argument more convincingly and in formal terms. According to him uncertainty increases with futurity.

That is, the further one looks into the future, the more uncertain dividends become. Accordingly, when dividend policy is considered in the context of uncertainty, the appropriate discount rate, K , cannot be assumed to be constant.

4 Krishman, John, E, Principles of Investment. McGraw Hill, 1933, P 737.

In fact, it increases with uncertainty; investors prefer to avoid uncertainty and would be willing to pay higher price for the share that pays the greater current dividend, all other things held constant.

But Myron Gordon (1963) only considers the viewpoint of the investors or shareholders and does not consider that even though a company does not pay out dividends to shareholders it could be using these retained earnings to finance investments that would result in a greater return on equity and assets for the shareholders.

Informational content of dividends (Ezra, 1963)

It is contended that dividends are relevant because they have informational value. A company can make statements about its expected earnings growth to shareholders to create a favourable impression on them. However, these statements would be paid better attention if they follow with a dividend action. The payment of dividend conveys to shareholders that the company is profitable and financially strong. When a firm changes its dividend policy, investors assume that it is in response to an expected change in the firm's profitability, which will last long. An increase in payout ratio signals to shareholders a permanent or long-term increase in a firm's expected earnings. Accordingly, the price of share may be affected by changes in dividend policy. Solomon Ezra (1963) contends that dividends may offer tangible evidence of the firm's ability to generate cash, and as a result the dividend policy of the firm affects the share price by changing attitude of investors.

This does not necessarily mean that when you pay dividend that you are signalling that the firm is performing well. The dividend could have been paid with borrowed funds, which the shareholders will have to pay for.

Therefore despite the fact that the theory of informational content of dividend advocates that dividends should be paid and that by paying them a firm is signalling that it expects its further earnings to increase it does not shed some light on how managers use retained earnings.

In practice firms will always retain part of their earnings and managers would like to use retained earnings so as to avoid the scrutiny of lenders if they decide to use debt.

Firms that opt to retain earnings also could be signalling that they have better prospects and could use the earnings to generate more revenue. This study therefore seeks to establish whether companies that retain earnings use this earnings to generate a growth in assets, return on assets and return on equity.

Dividend irrelevance (M & M 1961)

Miller and Modigliani (M& M 1961) said " In ideal circumstances the level of a firms dividends will not affect the value of the firm with shareholders being indifferent to an announcement of high or low levels of dividends."

They argued that the value of a company depends solely upon the investment

opportunities. They also argued that finance for investment is always available for worthwhile projects i.e. for a given set of investment opportunities the firm can raise sufficient capital internally or externally to fund both its investment programs and dividends.

Malkins (1993) reports that where shareholders are given a choice between bonus shares and cash dividends they tend to prefer cash dividends. The implications being that incomes return in the form of dividends are generally preferred to capital gains.

From the perspective of a firm's management an essential component of irrelevance view is that investment decisions should not be affected by dividend policy.

In a situation of induced capital market rationing it is accepted that investment choices will be heavily influenced by the quantity of retained earnings in which case dividend policy will directly impact on investment policy and M and M (1961) policy will not apply.

Studies of corporate dividend policy suggest that most companies have conscious or at least, some subconscious long-term target payout rate⁵.

⁵ A study conducted by John Linter in the mid 1950s in an article entitled "Distribution of incomes and corporations among dividends, retained earning and taxes" American economic review, 46: 97-113 (May 1956)

If management attempted to adhere to a target every year, then the level of the dividend would fluctuate as erratically as earnings. Therefore, they try to smooth dividends by moving only partway toward the target payout in each year. They also take into account expected future earnings, as well as current earnings, in setting a long - run target. From long experience, investors are aware of this and thus often interpret a large dividend increase as a sign of management's optimism about the company's prospects.

Thus, because unanticipated dividend changes convey information to the market about the outlook for profits, it makes sense to establish a reasonable set of investor expectations and to take these expectations into account when you decide on the annual payment.

A second reason that managers believe that the dividend decisions is important is because they assume that it will affect the investment decision. It makes sense to take account of investment opportunities when setting the dividend levels because the dividend decision has an effect on the investment decision, and retained earnings are often a source of funds for investments.

This theory asserts that a firm's dividend policy has no effect on its market value or its cost of capital. Dividend irrelevancy is also implied by the residual theory, which suggests that dividends should only be paid if funds are available after all positive NPV projects have been financed. M & M (1961) assert that the value of a firm is primarily determined by its ability to generate earnings from its

investments and by its level of business and financial risk. They argue that dividend policy is a "passive residual" which is determined by a firm's need for investment funds. According to M & M's (1961) irrelevancy theory it does not matter how a firm divides its earnings between dividend payment to shareholders and internal retention. In the M & M (1961) view the dividend decision is one over which managers need not agonise, trying to find the optimal dividend policy, because an optimal dividend policy does not exist. M&M (1961) said, "in ideal circumstances the level of a firm's dividends will not affect the value of the firm with shareholders being indifferent to an announcement of low or high levels of dividend"

The world does not always obey the theoretical assumptions and many caveats modify the M&M (1961) assumptions. But the present managers find the Modigliani and Miller (1961) theory useful especially on where to lay emphasis.

The implication of M&M (1961) proposition on managers is that they should spend more time managing the firm's assets. From the shareholders perspective irrelevancy implies that they are indifferent between receiving returns as dividends or as capital gains. A lower dividend implies a greater capital gain and a higher dividend implies a lower capital gain. The overall return being equivalent in either case.

From the perspective of a firm's management an essential component of irrelevancy view is that investment decisions should not be affected by dividend policy.

In a situation of induced capital market rationing, like in our case in Kenya where companies are expected to distribute a certain percentage of earnings as dividends it is expected that investment choices will be heavily influenced by the quantity of retained earnings in which case dividend policy will directly impact on investment policy and M & M (1961) policy will not apply.

There are two approaches employed in explaining dividend decision: -

- i) Theoretical result
- ii) Empirical observation

Theoretical Result

The theoretical result will be discussed under various headings

The pecking order model of corporate capital structure (Myers, 1984)

Myers (1984) asserts that the management of firms will follow a distinct order in their preferences for using sources of corporate finance. A possible interpretation is that managers do not seek to maintain an optimal or target capital structure.

Myers (1984) observes that managers will prefer first of all to use retained earning to issuing debt or equity. If retained earnings are exhausted or insufficient to fund investment projects and additional financing needs to be raised externally, then managers will prefer to use debt rather than equity. Thus in Myers (1984) view a firm's capital is simply a reflection of its past pecking order preferences for long- term financing.

In reality most managers would prefer to use retained earnings. Most of the times are so as to avoid the scrutiny involved when they use debt and to avoid the cost of issuing new equity. Though a company declares dividends it still retains some earnings, but the issue should be whether such retained earnings are used profitably.

The marginal principle of retained earnings (Modigliani and Miller, 1961)

This principle holds that the rate of return that the corporation can achieve on retained earnings for the benefit of shareholders must be compared to what shareholders could earn if the funds were paid out to them in dividends. Each potential project to be financed by internally generated funds must provide a higher rate of return than the stockholder could achieve for him/herself. We speak of this as the opportunity cost of using stockholder funds.

One of the major influences on dividends is the corporate growth rate in sales and the subsequent return on assets. A small firm in the initial stages of development pays no dividends because it needs all of its profits (if there are any) for reinvestment in new productive assets. Small firms at infancy may find it difficult raising funds externally.

According to the Marginal Principle of Retained earnings (M&M, 1961) if a company chooses to retain earnings then the rate of return that the corporation

can achieve on retained earnings must be comparable to what shareholders could earn if the funds were paid out to them in dividends⁶.

Merton Miller and Franco Modigliani (1961) declared dividend irrelevant. They contend that investors could "home brew" their own dividends by selling from or borrowing against their portfolios. Meanwhile the firms that issued the dividends would also incur costs to float new securities to maintain the optimal investment policies.

Since therefore, managers prefer to use retained earnings to finance internal investments then they should be able to earn a higher return than the shareholders would earn individually if they invested the money (earnings).

They therefore should be accountable for the retained earnings and this should be seen by the growth in assets, an increase in the return on assets and return on equity.

Dividends are moreover, taxable to many investors, while firms can reduce taxes by holding and re-investing their profits. Although dividends might make sense in connection with a change in investment policy- when, for example, the firms are disinvesting because they are liquidating or for other reasons,

⁶ Modigliani and Miller (1961), also M & M (1958); Joseph Stiglitz (1974).

shareholders can make better use of the money than benefit in the remaining cases of invariant investment policies⁷. The issue is do managers then use retained earnings to generate a higher rate of return than shareholders would?

The residual theory of dividend policy (Myers, 1984)

The essence of the residual theory of dividend policy is that the firm will only pay dividends from residual earnings, that is, from earnings left over after all suitable (positive NPV) investment opportunities have been financed. According to Myer's (1984) pecking order theory managers will prefer to utilise retained earnings as the primary source of investment financing, before resulting to issuing debt or equity. This is because retained earnings are a cheaper source of finance than making a fresh issue of equity due to expensive equity costs (e.g. advertising, brokerage and underwriting fees).

The existences of these issue costs are examples of real world market imperfections (as suggested by the dividend irrelevancy theory; M&M, 1961). This implies that most companies would favour using retained earnings to finance investment projects rather than making a fresh equity issue. This implies a residual approach to dividend policy, as the first claim on retained earnings will be the financing of investment projects.

⁷ Clifford Smith and Jerold Warner (1979) Kose John and Avuer Kaley (1982)

With a residual dividend policy, the primary focus of the firm's management is indeed on investments, not dividends. Dividend policy becomes irrelevant and it is treated as a passive, rather than an active decision variable. The view of management in this case is that the value of the firm and the wealth of its shareholders will be maximised by investing earnings in propriety investment projects, rather than paying them out as dividends to shareholders.

Thus managers will actively seek out, and invest the firm's earnings in all acceptable (in terms of risk and return) investment projects, which are expected to increase the value of the firm. Dividends will only be paid when retained earnings exceed the funds required to finance suitable investment projects.

The motives for a residual, or high retention, dividend policies commonly include;

- A high retention policy reduces the need to raise fresh capital (debt or equity) thus saving on associated issue and floatation costs.
- A fresh equity may dilute existing ownership control, this may be avoidable if retention are consistently high.
- A high retention policy may enable a company to finance a more rapid and higher rate of growth.

This theory therefore asserts that dividends can only be paid if all profitable ventures are invested in and there is a residue of retained earnings. But this then leads us to consider how managers use the retained earnings. The retained earnings should be used effectively which will be represented by some growth in total assets or some increase in the return on assets and equity.

Empirical observation

Investors may interpret the announcement that a firm has decided to increase dividends per share as good news because higher dividends per share imply that the firm believes future cash flows will be large enough to support the higher dividend level.

Managers, as insiders who have monopolistic access to information about the firm's cash flows, will choose to establish unambiguous signals about the firm's future if they have the proper incentive to do so. Stephen Ross (1977) proved that an increase in dividends paid out (or in the usage of debt) could represent an inimitable and unambiguous signal to the market place that a firm's prospects have improved.

Therefore we find that managers have been reluctant to reduce the dividend paid out over time out of their fear of investors.

Investors while accepting that earnings level may fluctuate in the short term seem to be strongly adverse to any signal that the underlying level or trend of earnings may be unsustainable.

Reduction in dividend has particularly unambiguous information content and is viewed as strong evidence that managers believe that earnings level can't be maintained in the long-term and has a profound effect in the market perception on the value of the company.

Manager might not also use retained earnings efficiently and the firm management that pays a low dividend in order to invest retained earnings avoids a cost and the scrutiny that comes with attempts to raise capital in the market.

Therefore, the issue is do managers use retained earnings efficiently and do they put it into better use than the shareholders would?

Does dividend policy matter?

What does dividend policy imply? Paying dividends involves outflow of cash. The cash available for the payment of dividends is affected by the firm's investment and financing decisions. A decision to incur capital expenditure implies that less cash will be available for the payment of dividends. Thus, investment decision affects dividend decision. If the firm's value is affected is it

because of the investment decision or the dividend decision? Given the firm's capital expenditure and that it does not have sufficient internal funds to pay dividends, it can raise funds by issuing new shares. In this case, the dividend decision is not separable from the firm's financing decision. The firm could also borrow to finance its investments.

The firm will have a given amount of cash available for paying dividends given its investment and financing decisions. Thus, a dividend decision involves a trade-off between the retained earnings and issuing new shares. It is essential to separate the effect of dividend changes from the effects of investment and financing decisions. Do changes in dividend policy alone affect the value of the firm? What factors are important in formulating a dividend policy in practice?

There is no single theory to explain or determine an optimal level of dividends. Research studies provide contradictory evidence, however from practical view points managers attempt to maintain a particular pay out ratio.

But of particular concern is whether managers of companies use retained earnings efficiently and this can be reflected in actual asset growth of the firm. This study will try to establish whether market value and the asset growth of companies are affected by dividend policy.

Abdul (1993) in her study where regression analysis was used found that the need for investments was not a conclusive variable /factor in the determination

of dividend policy. Researchers like Fama (1977) and Miller (1986) have also brought forward strong evidence suggesting no relationship between dividends and investments.

Abdul (1993) also suggests that further research can be carried out to determine the relationships between dividends and investments, which was inconclusive in her study. In the same study, the need for liquidity, working capital and profits were found to be significant factors in influencing dividend policy.

In another study conducted by Kamere (1987), it was observed that from the published reports of the companies in this study that, investments projects are usually financed by debt and internally generated funds.

Kamere (1987) also suggests need for further research to determine whether a firm's capital structure has any effect on the market value of firm. Since managers have a preference for retained earnings then the market value of a firm should grow over time.

3.0 CHAPTER THREE: RESEARCH DESIGN

3.1 THE POPULATION

The population of study was made up of all companies quoted on the Nairobi stock exchange as of December 1998. From this population a sample of companies which have been continuously quoted for eight years (1991 - 1998) was drawn. A period of eight years was chosen because the researcher considers the period to be adequate time for any relationship if it exists between dividend payout ratios and returns on asset, return on equity and growth in assets to be detected. This study was limited to quoted companies due to lack of readily available data among private companies. (A list of the companies studied can be found on appendix 2)

3.2 Data collection procedure

Secondary data was utilised for the purpose of this study. Data was extracted from the financial reports of the companies that fall under the chosen sample. The financial reports of the companies were obtained from the Nairobi stock exchange. The following data was extracted:

- i) Return on assets *
- ii) Return on equity
- iii) Growth in total assets
- iv) Average data on the return on assets, return on equity and growth in total assets.

3.3 Data analysis

3.3.1 Regression Model

Regression analysis was used to analyse data for each year. Regression techniques provide means of establishing quantitative associations between variables.

In this study, the dependent variable is the dividend payout ratio and the independent variables are return on assets, return on equity and growth in assets. Thus the regression analysis will uncover any association between dividend payout ratios and the predictor variables. The regression model will take the form:-

$$Y_{ji} = \beta_0 + \beta_k X_{kj}$$

Where: -

Y_{ji} is a typical value of the dividend payout ratio the dependent variable

β_0 Is the constant

β_k Is the population regression coefficient

X_{kj} Are the observed values of the independent variables.

Once the regression equation has been obtained significance tests have to be conducted so as to identify those parameters that are most important in the

regression model. Normally when conducting significance tests the following hypothesis is set: -

$$H_0 = \beta_1 = 0$$

$$H_A = \beta_1 \neq 0$$

P will be used to determine whether to accept or reject the null hypothesis. If P is greater than 0.05, it indicates that X_1 , which could be any of the independent variable, does not make a contribution to the ability to estimate the dependent variable. N - 2 degrees of freedom at the 95% level of confidence will be used to obtain the critical P - values.

To test the model fitness is explaining the relationship between dividend payout ratio and the predictor variables; analysis of variance (ANOVA) will be used. ANOVA tells us that at least one variable is significant.

3.3.2 Dividend Payout Ratios

The dividend payout ratios are divided into four categories; high dividend payout ratios (1) medium payout ratios (2), moderate payout ratios (3) and low payout ratios (4).

The researcher used these categories because from the findings some companies were maintaining a high dividend payout ratio, while at sometimes it would fluctuate and even sometimes no dividend were declared at all. It is necessary then to categorise, the payout ratios to capture the different pay-out schemes with the low payout ratio (4) category mainly preserved for companies with a zero (0) percent payout ratio and those mainly paying dividends out of previous years earnings, and hence with a dividend payout ratio below zero.

3.3.3 Correlation analysis

Correlation analysis is the statistical tool used to describe the degree to which one variable is related to another. The relationship, if any, is usually assumed to be a linear one. For correlation, it is essential that the two phenomena should have cause – effect relationship. If such relationship does not exist then one should not talk of correlation. In this study, the coefficient of correlation is used to measure the degree of relationship between dividend payout ratios, return on Assets, growth in assets and return on Equity. The limits of the correlation coefficient are +1 and –1.

Agricultural sector reported the highest growth in assets of around 33 per cent; Commercials 28 percent, Industrial, 24 percent and Financial 18 percent. At individual firm level, the highest average growth in assets is by Hutchings Biemer Ltd at 77 per cent.

Though Hutchings Biemer Ltd had the highest growth in assets it recorded the lowest average return on assets (-0.17 percent) over the period of study. This suggests that managers may not necessarily use retained earnings to invest in viable projects that result in greater returns to shareholders as shown by the return on assets. From the yearly growth in assets results, we see that Hutchings Biemer Ltd. had a high growth in assets, which would have been expected to result in a high return on assets.

The same results hold for OI Pejeta Ranching Ltd. Which also showed a high average growth in assets (77 percent) but a very low return on assets (2.95 percent). The market average growth in assets for the period of this study was 26 percent.

A summary of dividend payout ratios on individual companies from 1991 to 1998 and their classification is presented on table one below. The classification runs from 1 (high dividend payout ratio) to 4 (low dividend payout ratio).

TABLE 1: Dividend payout ratios (1991 - 1998)

Company	Sector	Rank								
		1991	1992	1993	1994	1995	1996	1997	1998	Average
Brooke Bond Kenya	A	1	1	1	2	1	2	4	1	2
Eaagad Ltd	A	4	4	2	2	2	3	2	1	3
George williamson	A	3	3	4	1	1	4	3	3	3
Kakuzi Ltd	A	2	2	3	3	2	3	3	3	3
Kapchorua Tea Co	A	4	4	4	4	2	3	2	3	3
Limuru Tea Co	A	1	1	1	1	1	1	1	1	1
OI Pejata Ranching	A	1	2	2	4	4	4	4	3	3
Rea Vipingo	A	4	4	4	4	3	2	2	4	3
Sasini Tea & Coffee	A	1	1	3	1	1	1	1	1	1
A. Baumann & Co.	C	2	4	4	4	3	4	4	1	3
Car & General Ltd	C	1	1	2	2	1	4	4	4	2
CMC Holdings	C	3	3	3	3	4	4	4	4	4
Express Kenya Ltd	C	1	1	2	2	2	2	2	1	2
Hutchings Biemers	C	3	3	3	3	4	4	4	4	4
Kenya Airways	C	4	4	4	4	4	3	3	4	4

Table: 1 Dividend payout ratios (1991 - 1998) con't

Lonhro Motors	C	3	1	1	1	2	2	4	4	2
Marshals E.A Ltd	C	3	4	4	3	3	2	2	4	3
Nation Printers	C	3	2	3	4	4	4	4	3	3
Pearly dry Cleaners	C	2	4	4	2	1	2	2	1	2
E.A. Standard	C	4	4	4	4	4	2	3	4	4
TPS (Serena Ltd)	C	4	4	4	4	4	1	1	2	3
Uchumi	C	4	4	1	1	1	1	1	1	1
Barclays Bank	F	2	1	1	2	2	2	2	2	2
CFC Bank	F	3	3	3	3	4	4	3	3	3
City Trust Ltd	F	3	3	2	2	4	4	3	1	3
Diamond Trust	F	3	2	3	3	3	4	3	3	3
H.F.C.K Ltd	F	1	2	3	2	3	3	2	2	2
I.C.D.C. investment	F	1	1	1	2	1	1	1	2	1
Jubilee Insurance	F	2	2	1	1	2	1	2	2	2
Kenya Commercial	F	2	2	3	3	4	3	3	1	3
National Bank	F	3	3	2	4	1	2	1	4	3
NIC Bank	F	3	3	2	3	3	3	3	3	3
Pan African Ins. Co	F	2	3	2	3	2	3	3	3	3
Standard Chartered	F	2	2	1	1	1	2	2	2	2
Athi river Mining	I	4	4	4	4	4	2	1	4	3

Table 1: Dividend payout ratios (1991 - 1998) con't

Bamburi Cement	I	4	4	3	1	3	2	2	2	2
BOC Kenya Ltd	I	3	2	1	1	2	2	2	2	2
BAT Kenya Ltd	I	1	1	1	1	1	1	1	2	1
Carbocid	I	2	3	3	3	3	3	3	2	3
Crown Berger Ltd	I	1	1	1	1	2	1	1	1	1
Dunlop Kenya	I	3	3	3	3	3	3	2	1	3
E.A Cables Ltd	I	2	2	2	2	2	1	2	1	2
E.A Packaging	I	2	2	4	2	2	4	4	4	3
E.A Portland	I	4	3	4	4	3	1	3	4	3
Firestone E.Africa	I	4	4	2	1	1	1	1	1	2
E.A Breweries	I	2	2	2	1	1	3	1	2	2
Kenya National Mills	I	2	4	3	3	1	3	4	4	3
Kenya Oil co.	I	1	3	2	3	3	3	4	3	3
Kenya Orchards	I	4	4	4	4	4	4	4	4	4
Kenya Power	I	4	2	4	4	4	4	3	3	4
Total Kenya	I	1	1	1	2	3	1	1	2	2
Unga Ltd	I	1	1	1	2	3	1	1	2	2

Sector codes represents;

A Agriculture

C Commercial

F Financial

I Industrial

Ranks represent;

1 High dividend payout ratio (60-100%)

2 Medium dividend payout ratio
(40-59%)

3 Moderate dividend payout ratio
(10-39%)

4 Low dividend payout ratio below
(0-10%)

A summary of the average dividend payout ratios for the various sectors is shown below: -

Table 2: Average Dividend payout ratios for the various sectors.

Sector	Average dividend payout ratio (Rank)
Agriculture	2
Commercial	2
Financial	3
Industrial	3

Ranks represent;

- 2 Medium payout ratio (40 – 59%)
- 3 Moderate payout ratio (10 – 39%)

4.1 Discussion of dividend payout ratio results

From Table 1 companies at the Nairobi stock exchange appear not to have reduced dividend, which contends with Ezra (1963) that dividends have informational value. Standard Newspapers in 1998 had a negative dividend payout ratio of 47.59 (-47.59), meaning that this company utilised previous years earnings to payout dividends (See appendix 3). Ol Pejeta Ranching Ltd in 1991, E.A Breweries in 1994 and Kapchorua Tea Company in 1994 are other firms that paid dividends out of the previous years retained earnings. A possible interpretation is that managers want to send a signal to the market and they will try not to reduce future dividend.

Limuru Tea Company, Brooke Bond, ICDC Investments, BAT Kenya, NIC Bank, Kenya Oil Co. and E.A cables Ltd maintained a constantly high dividend payout ratio over the period of study. (See appendix 3).

There were also exceptional cases like Uchumi Supermarkets that over the period of these study maintained a high dividend payout ratio and was ranked I. TPS (Serena) listed in 1996 had a dividend payout of 199.15 percent but in 1998 this fell to 58 percent. Kenya Orchards over the period of study did not payout any dividends (see appendix 3).

From Table 2, the average of average dividend payout ratios, the Agricultural and Commercial sectors had a higher dividend payout ratio as compared to the Financial and Industrial sectors.

The market average payout ratio is 44.4 percent in the period of study 1991 - 1998. The Industrial sector had the highest payout ratio on average that was 52 percent. The commercial payout ratio is the lowest at 37 percent. The Financials and Agricultural payout is 43 and 42 percent respectively.

At the individual firm level, the highest average dividend payout ratio is by Crown Berger Ltd, 116 percent and TPS (Serena), 114 percent. The lowest over the period was Ol Pejeta Ranching Ltd. With negative 16.5 (-16.5). The market average dividend payout ratio for this period of study was 44 percent.

4.2 . The relationship between dividend payout and return on assets, return on equity and growth in assets.

The regression results summarising the relationship between dividend payout ratios and return on assets, return on equity and growth in assets is on table 3 below. In the analysis the dependent variable(s) is dividend payout and the independent variables are return on assets, return on equity and growth in assets.

Table 3: Summary of relationships between dividend payout and return on assets, return on equity and growth in assets using regression analysis.

Year	Predictor Variable	Coef/ Beta	Std. Dev	T ratio	P	Conclusion
1998	CAROE	-11.762	3.662	-3.21	0.02	S
	CAROA	-9.960	4.066	-2.45	0.18	S
	CAG1A	- 1.586	4.089	-0.39	0.70	NS
1997	CAROE	-2.410	5.996	-0.40	0.69	NS
	CAROA	-6.745	5.814	-1.16	0.252	NS
	CAG1A	-2.17	5.897	-0.34	0.734	NS
1996	CAROE	3.863	7.838	0.49	0.624	NS
	CAROA	-7.725	7.772	-0.99	0.325	NS
	CAG1A	-5.063	7.662	-0.66	0.512	NS
1995	CAROE	6.419	7.682	0.84	0.408	NS
	CAROA	-0.947	7.777	-1.12	0.904	NS
	CAG1A	20.952	7.191	2.91	0.005	S
1994	CAROE	- 4.333	4.781	-0.91	0.369	NS
	CAROA	-10.670	4.642	-2.30	0.026	S
	CAG1A	4.688	4.857	0.97	0.340	NS
1993	CAROE	-0.543	3.403	-0.16	0.874	NS
	CAROA	-4.266	3.344	-1.28	0.209	NS
	CAG1A	-2.138	3.549	-0.62	0.540	NS
1992	CAROE	-5.321	3.625	-1.47	0.150	NS
	CAROA	-7.665	3.523	-2.180	0.035	S
	CAG1A	-1.721	3.714	-0.46	0.646	NS
Average Data	CAROA	-9.633	3.094	-3.11	0.003	S
	CAROE	-3.361	3.418	-0.98	0.330	NS
	CAG1A	-1.711	3.377	0.51	0.615	NS

The predictor variables represent;

ROE	Return on Equity
ROA	Return on Assets
gIA	Growth in assets
AROE	Average return on equity
AROA	Average return on assets
AgIA	Average growth in assets

Table 4: Summary of number of times the predictor variables are significant.

Predictor variable	No. of times it is significant	Percentage
ROE	1 out of 7	12%
ROA	3 out of 7	36%
G/A	1 out of 7	12%

Discussion of results

The results show that in 1998 both return on equity and return on assets was individually significantly related to dividend payout ratio. The growth in assets was not significant in determining the level of dividend to be paid out. This might suggest that managers consider the return on assets and return on equity in determining dividend payout and that there could be a lag between change in dividends payout ratio and growth.

In 1997 and 1996 none of the predictor variables was significant in determining the level of dividends to be paid out. Managers appear to have not considered the growth in assets, return on assets and return on equity in determining dividends to be paid out.

However in 1995 growth in assets is significant in determining the level of dividends to be paid out. The other predictor variables are not significant. In finance literature a firm that is expanding is likely not to have a high dividend payout ratio.

In 1994 return on assets is significant in explaining the level of dividend paid out. But the other variables are not important in determining the dividend payout ratios. In finance literature, return on assets is a measure of operating efficiency of the total business. Therefore, a higher return on assets results in a larger profit, hence a rewarding use of retained funds to shareholders.

Again in 1993, return on assets is significant in determining the level of dividend paid out. This means that managers consider return on assets - which measures how well management employ assets at their disposal to generate profits.

The related observation is that the beta coefficient (measure of rate of change in dividend payout ratio to return on assets, return equity and growth in assets) is negative in most of the cases (see table 3). This suggests that as the dividend

payout ratio increases, the return on assets, return on equity and growth in assets decrease. In finance literature dividend payment decision is treated as a residue decision, i.e. managers pay out dividends when they cannot earn a higher return on the retained earnings.

The overall picture is that the variables return on assets, return on equity and growth in assets derived from financial statements do not tell us much about dividend payout ratio (see table 4).

4.3 A simplified model of the relationship between dividend payout ratio and return on assets, return on equity and growth in assets.

In this section an attempt is made to determine whether corporate managers use far much simpler models different from the regression analysis above. The question is whether managers rely on naked eye?

A summary of average dividend payout ratios and average return on assets, average return on assets, average return on equities and average growth in assets from 1991 to 1998 is given below: -

Table 5: Yearly average dividend payout ratio against average growth in assets, average return on assets and average return on equity.

Year Average	1991	1992	1993	1994	1995	1996	1997	1998
Dividend Payout Ratios	48.62	40.52 (-)	38.91 (-)	40.56 (+)	49.39 (+)	52.73 (+)	45.96 (-)	38.88 (-)
Return on Assets	10.77	12.88 (+)	21.65 (+)	15.67 (-)	13.62 (-)	12.18 (-)	12.15 (-)	9.59 (-)
Growth in Assets	-	26.55 (N/A)	46.33 (+)	28.85 (-)	52.82 (+)	10.20 (-)	11.58 (+)	12.18 (+)
Return on equity	14.55	19.78 (+)	28.93 (+)	22.08 (-)	19.32 (-)	15.26 (-)	12.54 (-)	9.87 (-)

Discussion of results

Average dividend payout ratios Vs Average return on assets

We see that from the year-to-year average comparative data (Table 5) that when dividend payout ratios increase the return on assets decreases. The decreases though, are not very significant. This could mean that either firm's payout higher dividends when they are not able to earn a higher return on assets or there is a lag between the time an investment is made and the time return is realised.

Average dividends payout ratios Vs Average growth in assets

A part from a single period 1994 -95, where there is growth in assets despite the fact that dividend payout ratios was high, the rest of the data holds that the relationship between dividend payout ratios and growth or investment in assets is inverse. This suggests that managers used retained earnings as a source funds to financing corporate growth.

Average dividend payout ratios vs. Average return on equity

The relationship between this two variables suggests that over the years as dividend payout ratio increase the return on equity then decreases and vice versa. This suggests that dividend payout is a residue decision and if the firm can not earn a greater return to equity holders in terms of internally available profitable ventures or projects that maximise equity-holders returns, they would prefer to payout higher dividends. It could also mean that high payout reduces earning power of shareholders.

4.4 The relationship between dividend payout ratio, return on assets, growth in assets and return on equity using correlation analysis.

The average dividend payout ratios and average return on equity, average return on assets and average growth in assets correlate as:

Table: 6 The relationship between average dividend payout ratios and average return on equity, average return on assets and average growth in assets using correlation analysis.

	AVROE	AVROA	AVgIA
AVDPOR	0.236	0.414	-0.286

AVDPOR Average Dividend payout ratio

AVROE Average return on equity

AVROA Average return on assets

AVgIA Average growth in assets

AVDPOR Average Dividend Payout Ratio

The correlation between dividend payout ratios for all the years and the predictor variables is show as:-

Table 7:Dividend payout ratios against growth in assets, return on assets and return on equity using correlation analysis.

	Growth in Assets	Return on assets	Return on equity
DPOR 91	-	0.247	0.106
DPOR 92	0.007	0.391	0.203
DPOR 93	0.264	0.335	0.354
DPOR 94	- 0.093	0.298	0.157
DPOR 95	-0.440	-0.027	-0.097
DPOR 96	0.073	0.200	0.028
DPOR 97	0.020	0.214	0.223
DPOR 98	-0.188	0.402	0.435

DPOR Dividend payout ratio

Discussion of correlation results

In 1991 there is a low positive correlation between dividend payout ratio and return on assets and return on equity a possible explanation for this that Managers consider other factors when making decisions on dividend payout.

In 1992 and 1993 there is also a low positive correlation between dividend payout ratios and the three-predictor variables, which suggests Managers consider other factors when making decisions on dividend payout.

In 1994, there is a low negative correlation between the dividend payout ratio and growth in assets, but there is a low positive correlation between the dividend payout ratio and the other two-predictor variables which means that Managers in this year took into consideration the return on assets and return on equity when making decisions on dividend payout but did not consider growth in assets when making decisions on dividend payout.

In 1995 we see that there is low negative correlation between dividend payout ratio and the three-predictor variables, which suggests Managers consider other factors when making decisions on dividend payout.

In 1996 and 1997 there is also low positive correlation between dividend payout ratio and the three-predictor variables, which suggests Managers consider other factors when making decisions on dividend payout.

In 1998 though there is a low negative correlation between growth in assets and dividend payout ratio, the other variables have low positive correlation with dividend payout ratios which means that Managers in this year took into consideration the return on assets and return on equity when making decisions on dividend payout but did not consider growth in assets when making decisions on dividend payout.

The average data reveals that there is a low positive correlation between average dividend payout ratios and average return on equity, but a low negative correlation between average growth in assets and average growth in assets which suggests that on average Managers take into consideration return on equity when making decisions on dividend payout but did not consider growth in assets and return on assets when making decisions on dividend payout.

A lag was carried out to try and establish whether the results of the following year would be better correlated to the dividend payout ratio of the previous year. This is from the understanding that sometimes managers may invest in assets that might not necessarily yield returns in the same year, but in the following year.

A correlation of the dividend payout ratio and the return on assets, return on equity and growth in assets (lagged) found in appendix 6, also show that the correlation coefficient over the period is not very high which means that managers did not necessarily invest the retained earnings to generate higher returns for shareholders.

The overall picture from the regression model is that neither return on asset, return on equity nor growths in assets were significant in determining dividend payout ratios. But the Beta coefficient is negative in most of the cases, which suggests that Managers treat dividend payment decision as a residue decision.

The simplified model further proves that Managers in the real world treat dividend decisions as residue decisions. But from the study, there is an inverse relationship between dividend payout ratios and growth in assets, which may mean that Managers use retained earnings as a source of funds to finance corporate growth.

The above results are consistent with the findings of the correlation results, which further suggest that Managers do not consider return on assets, return on equity and growth in assets when making dividend decisions.

5.0. CHAPTER FIVE: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

5.1 Conclusions

The objectives of this study were to identify the different dividend payout ratios adopted by different firms and to establish the relationship between dividend payout ratios and growth in assets, return on assets and return on equity.

The average dividend payout ratios have been decreasing over the period of study. The average growth in assets has also been decreasing which suggests that managers might not be investing the retained earnings to generate a growth in assets and that the firms are using their retained earnings in other ways rather than in investing in internally viable projects e.g. like paying or redeeming fixed obligations.

In finance literature Companies with a high growth in assets are also expected to have higher return on assets and return on equity. But this is not the case from the results of return on assets and return on equity (see appendix 3). This might suggests that managers don't necessarily use retained earnings to generate a higher return for shareholders.

The average data on regression results proves that the only significant regression result was that on average return on assets. Which means that in making dividend decisions managers considered return on assets. The yearly results in 1992 and 1994 also suggest that return on assets is an important variable that managers consider in making dividend decisions.

The rest of the results are not conclusive which suggests that managers don't consider the return on equity and growth in assets in making dividend decisions. Majority of regression equations also reveal an inverse relationship between dividend payout ratios and the three-predictor variables. Which suggests that the decision to payout dividend is treated as a residue decision.

From Table 4 as dividend payout ratio increases the average yearly results of the three-predictor variables decreases. This suggests that the decision to payout dividends is treated as a residue decision. Again out of their fear of investors, managers could decide to payout dividends even when by doing so they will not necessarily be considering the wealth of the firm but that of shareholders.

The average yearly growth in assets has been decreasing from 1991 to 1998. Also the dividend payout is not increasing over this period of study. It would be expected that if managers were not paying out dividends, then growth would be seen in assets. This is not necessarily the case because dividend payout has been decreasing and also the growth in assets has also been decreasing over the period of study. Which might suggest that managers might not be using retained earnings to generate higher growth in assets.

The return on assets has been decreasing over the period of study. The return on assets is a major driver of the return on equity and therefore it is expected that a firm with a high return on assets will also have a high return on equity. But from the results of these two ratios we see that in some cases some companies

which had very low return on assets, showed a very high return on equity though in almost all cases, we see that a high return on assets is accompanied by an equivalently high return on equity.

From the results of the return on equity it can be concluded that on average the return on equity has been decreasing over the period of Study. This can be attributed to a decreasing return on assets and this may suggest that managers are not using the resources of owners well as should be reflected by a high return on equity.

The findings in this study are very helpful to potential investors who wish to invest in publicly quoted companies. An investor who is especially interested in cash dividends rather than capital gain will be able to distinguish those companies with a high dividend payout ratio from those with a high capital gain as reflected by an increase in assets and increase in share prices. The results of the study can also be used in establishing the different dividend policies adopted by the different firms

5.2 Limitations of the study

The study mainly relied on secondary data obtained at the Nairobi stock exchange. Which means that the researcher placed a high reliability on this data.

The period of study could also be extended to cover a larger period, which means that more meaningful relationships could be revealed. Due to the limitation of time the study could only cover companies quoted at the Nairobi Stock Exchange. The study could not therefore have considered unquoted companies.

There are limitations in using these ratios because they rely on accounting data that is historic in nature. The comparison of companies is also made difficult because of difference in situations of two companies or one company over years. The difference in definitions of items in balance sheet and the profit and loss statements make the interpretation of ratios difficult. The researcher used a sample of fifty-four firms that is quite small to make any generalizations across the industries. This sample cannot be used to generalise other companies not quoted on the Nairobi Stock exchange and thus the results may only hold for quoted companies only.

5.3 Recommendations for Further Research

A similar study could also be carried on unquoted companies to see whether the same results also hold. The variables identified in this study can also be tested on companies not quoted on the Nairobi Stock Exchange. The dividend payout ratios for other years can also be obtained and can also be used to try and validate the results.

The return on equity, return on assets and the yearly growth in assets for other years not used by the researcher can also be used to try and see whether the some results will hold.

Due to the shortcomings of regression models other models, can be used to explain various relationships between dividend payout ratios and variables such as return on assets.

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Appendix 1:Walter's Model

$$P = \frac{\text{Div}}{K} + \frac{r(\text{Eps} - \text{Div})}{K}$$

Where: P = market price per share

Div = dividend per share

Eps = earnings per share

r = firm's rate of return on its investment (averaged)

K = firm's cost of capital

Eps - Div = retained earnings

Appendix 2: Company and classification

Company	Sector	Code
Brooke Bond Kenya Ltd	Agriculture	1
Eagads Ltd	Agriculture	1
George Williamson Kenya Ltd	Agriculture	1
Kakuzi Ltd	Agriculture	1
Kapchorua Tea Company	Agriculture	1
Limuru Tea company Ltd	Agriculture	1
OI Pejeta Ranching Ltd	Agriculture	1
Rea Vipingo Plantations	Agriculture	1
Sasini tea & Coffee Ltd	Agriculture	1
A Baumann & Co Ltd	Commercial	2
Car & General (K) Ltd	Commercial	2
CMC Holdings	Commercial	2
Express Kenya Ltd	Commercial	2
Hutchings biemer Ltd	Commercial	2
Kenya airways Ltd	Commercial	2
Lonhro Motors (E.A) Ltd	Commercial	2
Marchalls E.A Ltd	Commercial	2
Nation Printers and Publishers Ltd	Commercial	2
Pearl Dry Cleaners Ltd	Commercial	2
The Standard Newspapers Ltd	Commercial	2
TPS (Serena Ltd)	Commercial	2
Uchumi super Markets Ltd	Commercial	2
Barclays Bank of Kenya Ltd	Financial	3
CFC Bank Ltd	Financial	3
City Trust Ltd	Financial	3

Appendix 2: company and classification con'l

Diamond Trust Bank Ltd	Financial	3
Housing Finance company of Kenya Ltd	Financial	3
I.C.D.C Investments Co.	Financial	3
Jubilee Insurance Company Ltd	Financial	3
Kenya Commercial Bank Ltd	Financial	3
National Bank of Kenya Ltd	Financial	3
NIC Bank Ltd	Financial	3
Pan African Insurance Co. Ltd	Financial	3
Standard Chartered Bank	Financial	3
Athi River Mining Ltd	Industrial	4
Bamburi Cement Ltd	Industrial	4
BOC Kenya Ltd	Industrial	4
BAT Kenya Ltd	Industrial	4
Carbacid investments Ltd	Industrial	4
Crown Berger Ltd	Industrial	4
Dunlop Kenya Ltd	Industrial	4
E A Cables Ltd	Industrial	4
E A Packaging industries	Industrial	4
E A Portland Cement Ltd	Industrial	4
Firestone East Africa (1969) Ltd	Industrial	4
E.A Breweries Ltd	Industrial	4
Kenya National Mills Ltd	Industrial	4
Kenya Oil Co. Ltd	Industrial	4
Kenya Orchards Ltd	Industrial	4
Kenya Power & Lighting Co. Ltd	Industrial	4
Total Kenya Ltd	Industrial	4
Unga Group Ltd	Industrial	4

APPENDIX 3: RESULTS OF DIVIDEND PAYOUT RATIOS

Dividend Pay Out Ratio Company	Sec	1998	1997	1996	1995	1994	1993	1992	1991	Avr	StDev	CoeVar
Brooke Bond Kenya Ltd.	A	85.11	0.00	59.11	97.78	59.61	91.07	84.62	85.85	70.39	29.65	0.42
Eagads Ltd	A	62.67	51.16	49.29	50.39	57.35	32.80	-28.05	-20.46	31.89	33.44	1.05
George Williamson Kenya Ltd*	A	37.29	23.59	22.81	73.66	85.24	10.70	13.78	35.57	37.83	25.69	0.68
Kakuzi Ltd	A	40.22	26.64	30.35	57.87	19.25	17.98	33.74	51.50	34.69	13.48	0.39
Kapchorua Tea Company Ltd*	A	41.44	39.34	31.09	72.75	-42.98	7.56	6.12	16.38	21.46	31.72	1.48
Limuru Tea Company Ltd.	A	81.88	78.00	73.56	83.23	71.99	99.73	99.80	96.99	85.65	10.83	0.13
OI Pejeta Ranching Ltd	A	12.65	1.04	-29.44	-240.17	-88.40	32.97	45.41	134.03	-16.49	103.36	-6.27
Rea Vipingo Plantations	A	0.00	40.27	50.78	30.42					30.37	18.95	0.62
Sasini Tea & Coffee Ltd.	A	93.69	76.39	99.85	99.54	79.15	30.84	67.65	80.88	78.50	21.00	0.27
A. Baumann & Co Ltd	C	84.88	2.21	0.22	26.35	0.84	-3.24	0.47	44.97	19.58	29.30	1.50
Car & General (K) Ltd	C	0.00	0.00	0.00	210.28	51.27	53.94	56.85	64.79	54.64	64.52	1.18
CMC Holdings	C	7.82	16.13	15.42	16.61	19.55	30.67	29.29	36.63	21.52	9.04	0.42
Express Kenya Ltd	C	61.46	59.72	59.31	55.40	61.22	45.95	58.01	59.67	57.59	4.75	0.08
Hutchings Biemer Ltd	C	0.00	0.00	12.81	13.89	14.03	18.24	14.88	25.53	12.42	8.10	0.65
Kenya Airways Ltd.*	C	0.00	35.08	40.66	0.00	0.00				15.15	18.64	1.23
Lonhro Motors (E.A) Ltd	C	0.00	0.00	60.45	60.77	89.02	75.34	99.63	23.82	51.13	36.28	0.71
Marshall's E.A Ltd	C	0.00	39.32	52.98	48.14	39.25	3.65	8.47	39.29	28.89	19.89	0.69
Nation Printers and Publishers Ltd	C	18.01	17.24	15.80	13.71	13.63	31.10	44.63	38.92	24.13	11.52	0.48
Pearl Dry Cleaners Ltd	C	0.00	0.00	63.14	80.15	49.36	50.37	59.36	51.27	44.21	27.16	0.61
The Standard Newspaper Ltd	C	-47.59	25.06	50.24	0.00	0.00	0.00	0.00	0.00	3.46	25.79	7.45
TPS (Serena Ltd)	C	58.28	85.36	199.15						114.26	61.03	0.53
Uchumi Super Markets Ltd	C	71.97	89.35	77.04	94.87	74.02	84.15			81.90	8.30	0.10
Barclays Bank of Kenya Ltd	F	56.57	57.42	51.92	50.52	43.17	56.14	66.00	57.14	54.86	6.17	0.11
CFC Bank Ltd.	F	28.01	25.97	26.58	15.74	16.51	20.95	26.90	35.21	24.48	6.05	0.25
City Trust Ltd*	F	99.98	24.73	25.72	7.22	42.70	33.70	22.29	19.48	34.48	26.57	0.77
Diamond Trust Bank Ltd	F	30.79	30.13	-69.52	40.30	35.40	31.24	46.64	40.81	23.22	35.47	1.53
Housing Finance Company Of Kenya	F	60.37	46.44	45.48	38.13	41.57	31.87	51.72	66.03	47.70	10.60	0.22
I.C.D.C Investments Co.	F	56.61	86.65	74.18	57.37	56.16	71.21	88.26	82.15	71.57	12.69	0.18
Jubilee Insurance Company Ltd	F	45.06	39.10	63.72	53.85	67.20	56.15	31.81	53.36	51.28	11.23	0.22
Kenya Commercial Bank Ltd.	F	73.59	34.97	31.40	21.28	19.34	21.10	37.73	53.00	36.55	17.47	0.48
National Bank Of Kenya Ltd	F	-3.54	64.48	59.72	81.03	8.08	35.64	28.55	33.14	38.39	26.84	0.70
NIC Bank Ltd	F	37.13	33.09	28.09	30.12	35.75	33.20	27.65	36.16	32.65	3.44	0.11
Pan African Insurance Co. Ltd.	F	33.01	35.29	43.91	71.51	30.62	51.80	28.98	40.88	42.00	13.21	0.31
Standard Chartered Bank	F	57.66	58.05	53.79	72.97	88.29	71.04	46.19	56.00	63.00	12.62	0.20
Athi River Mining Ltd.	I	0.00	64.53	55.42						39.99	28.52	0.71
Bamburi Cement Ltd.	I	47.89	52.31	51.24	31.14	64.86	22.40	18.25	15.44	37.94	17.28	0.46
BOC Kenya Ltd	I	44.80	47.98	54.26	70.23	75.12	58.69	53.69	38.81	55.45	11.55	0.21
BAT Kenya Ltd	I	48.62	70.97	71.29	75.76	61.65	60.61	79.33	85.77	69.25	11.08	0.16
Carbacid Investments Ltd.*	I	43.48	25.68	31.94	28.70	26.80	22.89	23.12	42.65	30.66	7.67	0.25
Crown Berger Ltd.	I	95.40	65.52	406.75	69.78	76.33	62.97	74.66	77.45	116.11	110.24	0.95
Dunlop Kenya Ltd.	I	66.15	45.92	47.01	45.30	37.99	28.73	27.17	29.08	40.92	12.27	0.30
E.A. Cables Ltd.	I	63.59	63.35	68.62	68.73	61.16	48.28	53.31	51.57	59.83	7.32	0.12
E.A. Packaging Industries Ltd.*	I	0.00	0.00	0.00	54.74	40.57	0.00	41.57	47.39	23.04	23.38	1.01
E.A. Portland Cement Ltd.*	I	0.00	23.95	66.30	44.64	10.74	7.42	9.84	0.00	20.36	22.11	1.09
Firestone East Africa (1969) Ltd.	I	68.18	69.19	67.27	76.15	75.83	47.36			67.33	9.60	0.14
E.A. Breweries Ltd.*	I	60.91	302.25	45.14	78.40	143.57	48.84	48.61	58.46	98.27	82.74	0.84
Kenya Natoinal Mills Ltd*	I	0.00	-2.43	49.69	207.23	28.99	31.47	-14.92	43.98	43.00	65.78	1.53
Kenya Oil Co. Ltd.	I	25.35	21.17	30.26	34.18	19.12	35.14	31.61	79.45	34.54	17.84	0.52
Kenya Orchards Ltd.	I											
Kenya Power & Lighting Co. Ltd.	I	28.86	27.19	12.62	3.04	5.19	-8.71	35.50		14.81	14.96	1.01
Total Kenya Ltd.	I	52.33	112.18	80.89	23.19	40.43	67.34	72.26	65.05	64.21	25.11	0.39
Unga Group Ltd	I	52.33	112.18	80.89	23.19	40.43	67.34	72.26	65.05	64.21	25.11	0.39
Sectorial Averages												
Agriculture		50.55	37.38	43.04	36.16	30.15	40.46	40.38	60.09	42.28	8.67	0.21
Commercial & Services		19.60	28.42	49.79	51.68	34.35	35.47	37.16	38.49	36.87	9.79	0.27
Financials		47.94	44.69	36.25	45.00	40.40	42.84	41.89	47.78	43.35	3.65	0.08
Industrial & Allied		41.05	64.82	71.74	58.40	50.55	37.55	41.75	50.01	51.98	11.37	0.22
Market Average		38.88	45.96	52.73	49.39	40.56	38.91	40.52	48.62	44.45	5.06	0.11

Company	Sec	DPOR91	CDPOR
OI Pejeta Ranching Ltd	1	134.03	1
Limuru Tea Company Ltd.	1	96.99	1
Brooke Bond Kenya Ltd.	1	85.85	1
BAT Kenya Ltd	4	85.77	1
I.C.D.C Investments Co.	3	82.15	1
Sasini Tea & Coffee Ltd.	1	80.88	1
Kenya Oil Co. Ltd.	4	79.45	1
Crown Berger Ltd.	4	77.45	1
Housing Finance Company Of Kenya Ltd	3	66.03	1
Total Kenya Ltd.	4	65.05	1
Unga Group Ltd	4	65.05	1
Car & General (K) Ltd	2	64.79	1
Express Kenya Ltd	2	59.67	1
E.A. Breweries Ltd.*	4	58.46	2
Barclays Bank of Kenya Ltd	3	57.14	2
Standard Chartered Bank	3	56.00	2
Jubilee Insurance Company Ltd	3	53.36	2
Kenya Commercial Bank Ltd.	3	53.00	2
E.A. Cables Ltd.	4	51.57	2
Kakuzi Ltd	1	51.50	2
Pearl Dry Cleaners Ltd	2	51.27	2
E.A. Packaging Industries Ltd.*	4	47.39	2
A.Baumann & Co Ltd	2	44.97	2
Kenya Natoinal Mills Ltd*	4	43.98	2
Carbacid Investments Ltd.*	4	42.65	2
Pan African Insurance Co. Ltd.	3	40.88	2
Diamond Trust Bank Ltd	3	40.81	3
Marshalls E.A Ltd	2	39.29	3
Nation Printers and Publishers Ltd	2	38.92	3
BOC Kenya Ltd	4	38.81	3
CMC Holdings	2	36.63	3
NIC Bank Ltd	3	36.16	3
George Williamson Kenya Ltd*	1	35.57	3
CFC Bank Ltd.	3	35.21	3
National Bank Of Kenya Ltd	3	33.14	3
Dunlop Kenya Ltd.	4	29.08	3
Hutchings Biemer Ltd	2	25.53	3
Lonhro Motors (E.A) Ltd	2	23.82	3
City Trust Ltd*	3	19.48	3
Kapchorua Tea Company Ltd*	1	16.38	4
Bamburi Cement Ltd.	4	15.44	4
Rea Vipingo Plantations	1	0.00	4
Kenya Airways Ltd.*	2	0.00	4
The Standard Newspaper Ltd	2	0.00	4
TPS (Serena Ltd)	2	0.00	4
Uchumi Super Markets Ltd	2	0.00	4
Athi River Mining Ltd.	4	0.00	4
E.A. Portland Cement Ltd.*	4	0.00	4
Firestone East Africa (1969) Ltd.	4	0	4
Kenya Orchards Ltd.	4	0.00	4
Kenya Power & Lighting Co. Ltd.	4	0.00	4
Eaagads Ltd	1	-20.46	4

Company	Sec	DPOR92	CDPOR
Limuru Tea Company Ltd.	1	99.80	1
Lonhro Motors (E.A) Ltd	2	99.63	1
I.C.D.C Investments Co.	3	88.26	1
Brooke Bond Kenya Ltd.	1	84.62	1
BAT Kenya Ltd	4	79.33	1
Crown Berger Ltd.	4	74.66	1
Total Kenya Ltd.	4	72.26	1
Unga Group Ltd	4	72.26	1
Sasini Tea & Coffee Ltd.	1	67.65	1
Barclays Bank of Kenya Ltd	3	66.00	1
Pearl Dry Cleaners Ltd	2	59.36	1
Express Kenya Ltd	2	58.01	1
Car & General (K) Ltd	2	56.85	1
BOC Kenya Ltd	4	53.69	2
E.A. Cables Ltd.	4	53.31	2
Housing Finance Company Of Kenya Ltd	3	51.72	2
E.A. Breweries Ltd.*	4	48.61	2
Diamond Trust Bank Ltd	3	46.64	2
Standard Chartered Bank	3	46.19	2
Oi Pejeta Ranching Ltd	1	45.41	2
Nation Printers and Publishers Ltd	2	44.63	2
E.A. Packaging Industries Ltd.*	4	41.57	2
Kenya Commercial Bank Ltd.	3	37.73	2
Kenya Power & Lighting Co. Ltd.	4	35.50	2
Kakuzi Ltd	1	33.74	2
Jubilee Insurance Company Ltd	3	31.81	2
Kenya Oil Co. Ltd.	4	31.61	3
CMC Holdings	2	29.29	3
Pan African Insurance Co. Ltd.	3	28.98	3
National Bank Of Kenya Ltd	3	28.55	3
NIC Bank Ltd	3	27.65	3
Dunlop Kenya Ltd.	4	27.17	3
CFC Bank Ltd.	3	26.90	3
Carbacid Investments Ltd.*	4	23.12	3
City Trust Ltd*	3	22.29	3
Bamburi Cement Ltd.	4	18.25	3
Hutchings Biemer Ltd	2	14.88	3
George Williamson Kenya Ltd*	1	13.78	3
E.A. Portland Cement Ltd.*	4	9.84	3
Marshalls E.A Ltd	2	8.47	4
Kapchorua Tea Company Ltd*	1	6.12	4
A.Baumann & Co Ltd	2	0.47	4
Rea Vipingo Plantations	1	0.00	4
Kenya Airways Ltd.*	2	0.00	4
The Standard Newspaper Ltd	2	0.00	4
TPS (Serena Ltd)	2	0.00	4
Uchumi Super Markets Ltd	2	0.00	4
Athi River Mining Ltd.	4	0.00	4
Firestone East Africa (1969) Ltd.	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
Kenya Natoinal Mills Ltd*	4	-14.92	4
Eaagads Ltd	1	-28.05	4

Company	Sec	DPOR93	CDPOR
Muru Tea Company Ltd.	1	99.73	1
Smoke Bond Kenya Ltd.	1	91.07	1
Numi Super Markets Ltd	2	84.15	1
Uhro Motors (E.A) Ltd	2	75.34	1
D C Investments Co.	3	71.21	1
Standard Chartered Bank	3	71.04	1
Kenya Ltd.	4	67.34	1
nga Group Ltd	4	67.34	1
own Berger Ltd.	4	62.97	1
AT Kenya Ltd	4	60.61	1
OC Kenya Ltd	4	58.69	1
ilee Insurance Company Ltd	3	56.15	1
clays Bank of Kenya Ltd	3	56.14	1
ar & General (K) Ltd	2	53.94	2
an African Insurance Co. Ltd.	3	51.80	2
earl Dry Cleaners Ltd	2	50.37	2
A. Breweries Ltd.*	4	48.84	2
A. Cables Ltd.	4	48.28	2
restone East Africa (1969) Ltd.	4	47.36	2
xpress Kenya Ltd	2	45.95	2
ational Bank Of Kenya Ltd	3	35.64	2
Kenya Oil Co. Ltd.	4	35.14	2
ty Trust Ltd*	3	33.70	2
IC Bank Ltd	3	33.20	2
Q Pejeta Ranching Ltd	1	32.97	2
agads Ltd	1	32.80	2
ousing Finance Company Of Kenya Ltd	3	31.87	3
Kenya Natoinal Mills Ltd*	4	31.47	3
iamond Trust Bank Ltd	3	31.24	3
tion Printers and Publishers Ltd	2	31.10	3
sini Tea & Coffee Ltd.	1	30.84	3
IC Holdings	2	30.67	3
anlop Kenya Ltd.	4	28.73	3
rbacid Investments Ltd.*	4	22.89	3
mburi Cement Ltd.	4	22.40	3
Kenya Commercial Bank Ltd.	3	21.10	3
EC Bank Ltd.	3	20.95	3
ilchings Biemer Ltd	2	18.24	3
akuzi Ltd	1	17.98	3
orge Williamson Kenya Ltd*	1	10.70	4
apchorua Tea Company Ltd*	1	7.56	4
A Portland Cement Ltd.*	4	7.42	4
marshalls E.A Ltd	2	3.65	4
ne Vipingo Plantations	1	0.00	4
Kenya Airways Ltd.*	2	0.00	4
Standard Newspaper Ltd	2	0.00	4
IS (Serena Ltd)	2	0.00	4
ni River Mining Ltd.	4	0.00	4
A. Packaging Industries Ltd.*	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
Gaumann & Co Ltd	2	-3.24	4
Kenya Power & Lighting Co. Ltd.	4	(8.71)	4

Company	Sec	DDPOR94	CDPOR
E.A. Breweries Ltd.*	4	143.57	1
Lonhro Motors (E.A) Ltd	2	89.02	1
Standard Chartered Bank	3	88.29	1
George Williamson Kenya Ltd*	1	85.24	1
Sasini Tea & Coffee Ltd.	1	79.15	1
Crown Berger Ltd.	4	76.33	1
Firestone East Africa (1969) Ltd.	4	75.83	1
BOC Kenya Ltd	4	75.12	1
Juchumi Super Markets Ltd	2	74.02	1
Mumuru Tea Company Ltd.	1	71.99	1
Jubilee Insurance Company Ltd	3	67.20	1
Bamburi Cement Ltd.	4	64.86	1
BAT Kenya Ltd	4	61.65	1
Express Kenya Ltd	2	61.22	2
E.A. Cables Ltd.	4	61.16	2
Brooke Bond Kenya Ltd.	1	59.61	2
Teagads Ltd	1	57.35	2
C.D.C Investments Co.	3	56.16	2
Car & General (K) Ltd	2	51.27	2
Pearl Dry Cleaners Ltd	2	49.36	2
Barclays Bank of Kenya Ltd	3	43.17	2
City Trust Ltd*	3	42.70	2
Housing Finance Company Of Kenya Ltd	3	41.57	2
E.A. Packaging Industries Ltd.*	4	40.57	2
Total Kenya Ltd.	4	40.43	2
Jinga Group Ltd	4	40.43	2
Marshall's E.A Ltd	2	39.25	3
Dunlop Kenya Ltd.	4	37.99	3
NIC Bank Ltd	3	35.75	3
Diamond Trust Bank Ltd	3	35.40	3
Pan African Insurance Co. Ltd.	3	30.62	3
Kenya National Mills Ltd*	4	28.99	3
Carbacid Investments Ltd.*	4	26.80	3
CMC Holdings	2	19.55	3
Kenya Commercial Bank Ltd.	3	19.34	3
Kakuzi Ltd	1	19.25	3
Kenya Oil Co. Ltd.	4	19.12	3
CFC Bank Ltd.	3	16.51	3
Plutchings Biemer Ltd	2	14.03	3
Station Printers and Publishers Ltd	2	13.63	4
A. Portland Cement Ltd.*	4	10.74	4
National Bank Of Kenya Ltd	3	8.08	4
Kenya Power & Lighting Co. Ltd.	4	5.19	4
A. Baumann & Co Ltd	2	0.84	4
Tea Vipingo Plantations	1	0.00	4
Kenya Airways Ltd.*	2	0.00	4
Standard Newspaper Ltd	2	0.00	4
PS (Serena Ltd)	2	0.00	4
Kenya River Mining Ltd.	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
Mapchorua Tea Company Ltd*	1	-42.98	4
Pejeta Ranching Ltd	1	(88.40)	4

Company	Sec	DPOR95	CDPOR
Car & General (K) Ltd	2	210.28	1
Kenya National Mills Ltd*	4	207.23	1
Sisini Tea & Coffee Ltd.	1	99.54	1
Brooke Bond Kenya Ltd.	1	97.78	1
Muhumi Super Markets Ltd	2	94.87	1
Mumuru Tea Company Ltd.	1	83.23	1
National Bank Of Kenya Ltd	3	81.03	1
Pearl Dry Cleaners Ltd	2	80.15	1
E. A. Breweries Ltd.*	4	78.40	1
Firestone East Africa (1969) Ltd.	4	76.15	1
BAT Kenya Ltd	4	75.76	1
George Williamson Kenya Ltd*	1	73.66	1
Standard Chartered Bank	3	72.97	1
Tapchorua Tea Company Ltd*	1	72.75	2
Pan African Insurance Co. Ltd.	3	71.51	2
BOC Kenya Ltd	4	70.23	2
Crown Berger Ltd.	4	69.78	2
E. A. Cables Ltd.	4	68.73	2
Lonhro Motors (E.A) Ltd	2	60.77	2
Kakuzi Ltd	1	57.87	2
I.C.D.C Investments Co.	3	57.37	2
Express Kenya Ltd	2	55.40	2
E.A. Packaging Industries Ltd.*	4	54.74	2
Jubilee Insurance Company Ltd	3	53.85	2
Barclays Bank of Kenya Ltd	3	50.52	2
Eaagads Ltd	1	50.39	2
Marshalls E.A Ltd	2	48.14	3
Dunlop Kenya Ltd.	4	45.30	3
E.A. Portland Cement Ltd.*	4	44.64	3
Diamond Trust Bank Ltd	3	40.30	3
Housing Finance Company Of Kenya Ltd	3	38.13	3
Kenya Oil Co. Ltd.	4	34.18	3
Bamburi Cement Ltd.	4	31.14	3
Rea Vipingo Plantations	1	30.42	3
NIC Bank Ltd	3	30.12	3
Carbacid Investments Ltd.*	4	28.70	3
A.Baumann & Co Ltd	2	26.35	3
Total Kenya Ltd.	4	23.19	3
Unga Group Ltd	4	23.19	3
Kenya Commercial Bank Ltd.	3	21.28	4
CMC Holdings	2	16.61	4
CFC Bank Ltd.	3	15.74	4
Hutchings Biemer Ltd	2	13.89	4
Nation Printers and Publishers Ltd	2	13.71	4
City Trust Ltd*	3	7.22	4
Kenya Power & Lighting Co. Ltd.	4	3.04	4
Kenya Airways Ltd.*	2	0.00	4
The Standard Newspaper Ltd	2	0.00	4
TPS (Serena Ltd)	2	0.00	4
Atthi River Mining Ltd.	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
Oi Pejeta Ranching Ltd	1	(240.17)	4

Company	Sec	DPOR96	CDPOR
Crown Berger Ltd.	4	406.75	1
TPS (Serena Ltd)	2	199.15	1
Basini Tea & Coffee Ltd.	1	99.85	1
Total Kenya Ltd.	4	80.89	1
Unga Group Ltd	4	80.89	1
Uchumi Super Markets Ltd	2	77.04	1
C.D.C Investments Co.	3	74.18	1
Mumuru Tea Company Ltd.	1	73.56	1
BAT Kenya Ltd	4	71.29	1
E.A. Cables Ltd.	4	68.62	1
Firestone East Africa (1969) Ltd.	4	67.27	1
E.A. Portland Cement Ltd.*	4	66.30	1
Lubilee Insurance Company Ltd	3	63.72	1
Pearl Dry Cleaners Ltd	2	63.14	2
Lonhro Motors (E.A) Ltd	2	60.45	2
National Bank Of Kenya Ltd	3	59.72	2
Express Kenya Ltd	2	59.31	2
Brooke Bond Kenya Ltd.	1	59.11	2
Athi River Mining Ltd.	4	55.42	2
BOC Kenya Ltd	4	54.26	2
Standard Chartered Bank	3	53.79	2
Marshalls E.A Ltd	2	52.98	2
Barclays Bank of Kenya Ltd	3	51.92	2
Bamburi Cement Ltd.	4	51.24	2
Rea Vipingo Plantations	1	50.78	2
The Standard Newspaper Ltd	2	50.24	2
Kenya Natoinal Mills Ltd*	4	49.69	3
Eaagads Ltd	1	49.29	3
Dunlop Kenya Ltd.	4	47.01	3
Housing Finance Company Of Kenya Ltd	3	45.48	3
E.A. Breweries Ltd.*	4	45.14	3
Pan African Insurance Co. Ltd.	3	43.91	3
Kenya Airways Ltd.*	2	40.66	3
Carbacid Investments Ltd.*	4	31.94	3
Kenya Commercial Bank Ltd.	3	31.40	3
Kapchorua Tea Company Ltd*	1	31.09	3
Kakuzi Ltd	1	30.35	3
Kenya Oil Co. Ltd.	4	30.26	3
NIC Bank Ltd	3	28.09	3
CFC Bank Ltd.	3	26.58	4
City Trust Ltd*	3	25.72	4
George Williamson Kenya Ltd*	1	22.81	4
Nation Printers and Publishers Ltd	2	15.80	4
CMC Holdings	2	15.42	4
Hutchings Biemer Ltd	2	12.81	4
Kenya Power & Lighting Co. Ltd.	4	12.62	4
A.Baumann & Co Ltd	2	0.22	4
Gar & General (K) Ltd	2	0.00	4
E.A. Packaging Industries Ltd.*	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
Oi Pejeta Ranching Ltd	1	(29.44)	4
Diamond Trust Bank Ltd	3	-69.52	4

Company	Sec	DPOR97	CDPOR
E.A. Breweries Ltd.*	4	302.25	1
Total Kenya Ltd.	4	112.18	1
Unga Group Ltd	4	112.18	1
Uchumi Super Markets Ltd	2	89.35	1
C.D.C Investments Co.	3	86.65	1
TPS (Serena Ltd)	2	85.36	1
Mumuru Tea Company Ltd.	1	78.00	1
Sasini Tea & Coffee Ltd.	1	76.39	1
BAT Kenya Ltd	4	70.97	1
Firestone East Africa (1969) Ltd.	4	69.19	1
Crown Berger Ltd.	4	65.52	1
Athi River Mining Ltd.	4	64.53	1
National Bank Of Kenya Ltd	3	64.48	1
E.A. Cables Ltd.	4	63.35	2
Express Kenya Ltd	2	59.72	2
Standard Chartered Bank	3	58.05	2
Barclays Bank of Kenya Ltd	3	57.42	2
Bamburi Cement Ltd.	4	52.31	2
Eaagads Ltd	1	51.16	2
BOC Kenya Ltd	4	47.98	2
Housing Finance Company Of Kenya Ltd .	3	46.44	2
Dunlop Kenya Ltd.	4	45.92	2
Rea Vipingo Plantations	1	40.27	2
Kapchorua Tea Company Ltd*	1	39.34	2
Marshall's E.A Ltd	2	39.32	2
Jubilee Insurance Company Ltd	3	39.10	2
Pan African Insurance Co. Ltd.	3	35.29	3
Kenya Airways Ltd.*	2	35.08	3
Kenya Commercial Bank Ltd.	3	34.97	3
NIC Bank Ltd	3	33.09	3
Diamond Trust Bank Ltd	3	30.13	3
Kenya Power & Lighting Co. Ltd.	4	27.19	3
Kakuzi Ltd	1	26.64	3
CFC Bank Ltd.	3	25.97	3
Carbacid Investments Ltd.*	4	25.68	3
The Standard Newspaper Ltd	2	25.06	3
City Trust Ltd*	3	24.73	3
E.A. Portland Cement Ltd.*	4	23.95	3
George Williamson Kenya Ltd*	1	23.59	3
Kenya Oil Co. Ltd.	4	21.17	4
ation Printers and Publishers Ltd	2	17.24	4
LMC Holdings	2	16.13	4
A Baumann & Co Ltd	2	2.21	4
ui Pejeta Ranching Ltd	1	1.04	4
Brooke Bond Kenya Ltd.	1	0.00	4
Car & General (K) Ltd	2	0.00	4
Hutchings Biemer Ltd	2	0.00	4
onhro Motors (E.A) Ltd	2	0.00	4
Pearl Dry Cleaners Ltd	2	0.00	4
A Packaging Industries Ltd.*	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
Kenya Natoi Mills Ltd*	4	-2.43	4

Company	Sec	DPOR98	CDPOR
City Trust Ltd*	3	99.98	1
Crown Berger Ltd.	4	95.40	1
Sasini Tea & Coffee Ltd.	1	93.69	1
Brooke Bond Kenya Ltd.	1	85.11	1
A.Baumann & Co Ltd	2	84.88	1
Limuru Tea Company Ltd.	1	81.88	1
Kenya Commercial Bank Ltd.	3	73.59	1
Uchumi Super Markets Ltd	2	71.97	1
Firestone East Africa (1969) Ltd.	4	68.18	1
Dunlop Kenya Ltd.	4	66.15	1
E.A. Cables Ltd.	4	63.59	1
Eaagads Ltd	1	62.67	1
Express Kenya Ltd	2	61.46	1
E.A. Breweries Ltd.*	4	60.91	2
Housing Finance Company Of Kenya Ltd	3	60.37	2
TPS (Serena Ltd)	2	58.28	2
Standard Chartered Bank	3	57.66	2
I.C.D.C Investments Co.	3	56.61	2
Barclays Bank of Kenya Ltd	3	56.57	2
Total Kenya Ltd.	4	52.33	2
Unga Group Ltd	4	52.33	2
BAT Kenya Ltd	4	48.62	2
Bamburi Cement Ltd.	4	47.89	2
Jubilee Insurance Company Ltd	3	45.06	2
BOC Kenya Ltd	4	44.80	2
Carbacid Investments Ltd.*	4	43.48	2
Kapchorua Tea Company Ltd*	1	41.44	3
Kakuzi Ltd	1	40.22	3
George Williamson Kenya Ltd*	1	37.29	3
NIC Bank Ltd	3	37.13	3
Pan African Insurance Co. Ltd.	3	33.01	3
Diamond Trust Bank Ltd	3	30.79	3
Kenya Power & Lighting Co. Ltd.	4	28.86	3
CFC Bank Ltd.	3	28.01	3
Kenya Oil Co. Ltd.	4	25.35	3
Nation Printers and Publishers Ltd	2	18.01	3
OI Pejeta Ranching Ltd	1	12.65	3
CMC Holdings	2	7.82	3
Rea Vipingo Plantations	1	0.00	3
Car & General (K) Ltd	2	0.00	4
Hutchings Biemer Ltd	2	0.00	4
Kenya Airways Ltd.*	2	0.00	4
Lonhro Motors (E.A) Ltd	2	0.00	4
Marshalls E.A Ltd	2	0.00	4
Pearl Dry Cleaners Ltd	2	0.00	4
Athi River Mining Ltd.	4	0.00	4
E.A. Packaging Industries Ltd.*	4	0.00	4
E.A. Portland Cement Ltd.*	4	0.00	4
Kenya Natoinal Mills Ltd*	4	0.00	4
Kenya Orchards Ltd.	4	0.00	4
National Bank Of Kenya Ltd	3	-3.54	4
The Standard Newspaper Ltd	2	-47.59	4

Yearly Growth Rates in Total Assets in (%)

Company	Sector	97/98&9	96/97	95/96	94/95	93/94	92/93	91/92	Avr	Stdev	CoeV	High	Low
Brooke Bond Kenya Ltd.	Agri.	-7.31	-6.02	-10.22	7.72	-6.33	263.90	7.10	35.5	93.5	2.6	263.9	-10.2
Eagads Ltd	Agri.	19.44	20.21	0.69	-7.50	123.12			31.2	47.2	1.5	123.1	-7.5
George Williamson Kenya Ltd*	Agri.	32.31	23.56	3.43	-0.62	-3.26	40.75	76.50	24.7	26.4	1.1	76.5	-3.3
Kakuzi Ltd	Agri.	10.91	36.46	9.45	5.39	8.70	179.21	13.42	37.6	58.6	1.6	179.2	5.4
Kapchorua Tea Company Ltd*	Agri.	6.93	32.15	8.28	6.78	-14.84	17.86	87.00	20.6	30.1	1.5	87.0	-14.8
Limuru Tea Company Ltd.	Agri.	2.01	68.82	5.86	-15.29	-58.19	124.95	33.51	23.1	55.3	2.4	125.0	-58.2
OI Pejeta Ranching Ltd	Agri.		6.04	-11.73	440.25	0.67	29.47	-0.36	77.4	162.8	2.1	440.2	-11.7
Rea Vipingo Plantations	Agri.	5.99	12.60	-1.25					5.8	5.7	1.0	12.6	-1.2
Sasini Tea & Coffee Ltd.	Agri.	2.75	2.82	1.47	227.74	-5.64	83.78	-1.85	44.4	80.3	1.8	227.7	-5.6
A.Baumann & Co Ltd	Comm	17.57	1.09	5.01	-7.63	68.48	26.86	9.32	17.2	23.3	1.4	68.5	-7.6
Car & General (K) Ltd	Comm	-4.10	-21.36	-10.51	4.52	-2.46	32.33	-2.33	-0.6	15.4	-27.5	32.3	-21.4
CMC Holdings	Comm	-1.23	14.21	19.95	29.19	53.94	12.93	-9.97	17.0	19.3	1.1	53.9	-10.0
Express Kenya Ltd	Comm	-0.36	3.02	-16.42	35.93	67.78	58.13	-14.36	19.1	32.1	1.7	67.8	-16.4
Hutchings Biemer Ltd	Comm	280.73	11.16	17.23	719.47	15.95	111.01	-8.69	163.8	245.4	1.5	719.5	-8.7
Kenya Airways Ltd.*	Comm	32.25	19.67	10.66	26.14				22.2	8.0	0.4	32.3	10.7
Lonhro Motors (E.A) Ltd	Comm	-13.64	39.99	37.38	104.12	114.16	23.00	17.07	46.0	43.2	0.9	114.2	-13.6
Marshall's E.A Ltd	Comm	-19.09	-0.47	-1.76	73.27	11.39	7.27	8.66	11.3	27.0	2.4	73.3	-19.1
Nation Printers and Publishers Ltd	Comm	9.58	10.79	43.83	28.48	22.60	14.54	25.71	22.2	11.1	0.5	43.8	9.6
Pearl Dry Cleaners Ltd	Comm	-10.78	-9.24	92.20	5.49	5.09	12.12	4.12	14.1	32.8	2.3	92.2	-10.8
The Standard Newspaper Ltd	Comm	65.74	18.84	-8.35	55.46	-15.03	24.33	-9.81	18.7	29.9	1.6	65.7	-15.0
TPS (Serena Ltd)	Comm	3.38	-6.95						-1.8	5.2	-2.9	3.4	-7.0
Uchumi Super Markets Ltd	Comm	14.12	19.11	10.10	9.46	22.55			15.1	5.1	0.3	22.6	9.5
Barclays Bank of Kenya Ltd	Financial	16.18	14.94	13.97	7.88	8.99	52.45	21.99	19.5	14.1	0.7	52.5	7.9
CFC Bank Ltd.	Financial	2.75	11.40	9.79	40.06	38.93	32.44	27.60	23.3	14.0	0.6	40.1	2.7
City Trust Ltd*	Financial	-0.18	9.52	12.69	69.07	23.85	29.00	11.41	22.2	21.1	1.0	69.1	-0.2
Diamond Trust Bank Ltd	Financial	-11.20	-19.04	4.52	17.03	34.03	39.01	17.69	11.7	20.1	1.7	39.0	-19.0
Housing Finance Company Of Kenya	Financial	27.60	14.65	22.88	23.41	20.79	10.52	21.00	20.1	5.3	0.3	27.6	10.5
I.C.D.C Investments Co. Ltd.	Financial	16.45	14.52	13.97	18.77	18.01	6.90	4.83	13.3	5.0	0.4	18.8	4.8
Jubilee Insurance Company Ltd	Financial	4.33	24.62	10.75	18.11	35.99	46.63	13.64	22.0	13.8	0.6	46.6	4.3
Kenya Commercial Bank Ltd.	Financial	6.75	7.76	17.88	-4.49	57.38	48.89	15.02	21.3	21.3	1.0	57.4	-4.5
National Bank Of Kenya Ltd	Financial	-17.14	27.17	33.91	3.93	36.97	19.96	10.35	16.5	17.6	1.1	37.0	-17.1
NIC Bank Ltd	Financial	-8.23	11.36	17.92	37.99	36.47	20.35	13.76	18.5	14.6	0.8	38.0	-8.2
Pan African Insurance Co. Ltd.	Financial	5.20	3.91	4.77	52.30	10.37	17.50	34.84	18.4	17.1	0.9	52.3	3.9
Standard Chartered Bank	Financial	16.11	6.29	13.24	5.24	10.53	26.02	17.21	13.5	6.6	0.5	26.0	5.2
Athi River Mining Ltd.	Industrial	12.72	15.58						14.2	1.4	0.1	15.6	12.7
Bamburi Cement Ltd.	Industrial	5.28	7.65	-0.80	192.79	-6.51	-7.33	186.58	54.0	86.0	1.6	192.8	-7.3
BOC Kenya Ltd	Industrial	-1.28	-5.55	17.97	0.50	-5.15	82.97	0.92	12.9	29.5	2.3	83.0	-5.5
BAT Kenya Ltd	Industrial	9.67	8.71	-0.46	-7.53	34.48	7.76	54.97	15.4	20.2	1.3	55.0	-7.5
Carbacid Investments Ltd.*	Industrial	17.36	11.68	6.20	11.54	5.02	97.82	13.48	23.3	30.7	1.3	97.8	5.0
Crown Berger Ltd.	Industrial	-13.37	-8.28	11.59	35.84	7.49	1.36	195.54	32.9	68.0	2.1	195.5	-13.4
Dunlop Kenya Ltd.	Industrial	5.85	35.68	13.58	33.73	16.25	21.43	29.00	22.2	10.3	0.5	35.7	5.8
E.A. Cables Ltd.	Industrial	10.70	16.44	10.71	6.87	10.81	26.96	9.68	13.2	6.2	0.5	27.0	6.9
E.A. Packaging Industries Ltd.*	Industrial	-2.92	-5.24	-4.78	15.01	22.80	18.33	38.58	11.7	15.5	1.3	38.6	-5.2
E.A. Portland Cement Ltd.*	Industrial	4.18	4.15	-3.51	26.45	352.95	39.39	62.53	69.4	117.7	1.7	353.0	-3.5
Firestone East Africa (1969) Ltd.	Industrial	5.89	16.62	3.83	39.00	-0.69			12.9	14.2	1.1	39.0	-0.7
E.A. Breweries Ltd.*	Industrial	-1.91	11.12	7.23	4.60	5.40	119.15	29.69	25.0	39.5	1.6	119.2	-1.9
Kenya Natioanal Mills Ltd*	Industrial	-13.29	47.98	-3.85	15.26	-1.84	41.79	5.81	13.1	21.7	1.7	48.0	-13.3
Kenya Oil Co. Ltd.	Industrial	37.27	6.59	7.24	83.52	4.30	-0.36	55.68	27.7	29.7	1.1	83.5	-0.4
Kenya Orchards Ltd.	Industrial	-4.86	4.17	11.87	34.35	129.45	159.21	-23.89	44.3	65.8	1.5	159.2	-23.9
Kenya Power & Lighting Co. Ltd.	Industrial	3.08	14.42	16.35	36.55	24.96	18.17	6.47	17.1	10.4	0.6	36.6	3.1
Total Kenya Ltd.	Industrial	6.46	-0.96	20.62	16.45	7.47	45.58	34.72	18.6	15.4	0.8	45.6	-1.0
Unga Group Ltd	Industrial	34.41	-2.23	14.49	5.54	36.70	0.66	50.49	20.0	19.0	0.9	50.5	-2.2

Sectorial Averages

Agriculture	9.13	21.85	0.66	83.06	5.53	105.70	30.76	33.37	62.19	1.72	170.59	-11.92
Commercial & Services	28.78	7.68	16.61	90.32	33.13	32.25	1.97	28.04	38.29	-1.25	106.87	-7.68
Financials	4.89	10.59	14.69	24.11	27.69	29.14	17.44	18.36	14.23	0.79	42.02	-0.80
Industrial & Allied	6.40	9.92	7.55	32.38	37.88	42.06	46.89	24.89	33.40	1.22	93.07	-2.91
Market Average	12.18	11.58	10.20	52.82	28.85	46.33	26.55	25.64	35.18	0.59	98.16	-5.17

Return(Accounting) on Equity.

	Code	Sector	1998	1997	1996	1995	1994	1993	1992	1991	Avr	Stdev	Cov	High	Low
Company															
Bond Kenya Ltd	Bbond	Agri.	4.33	-4.50	3.01	0.87	7.10	16.19	36.59	28.10	11.46	14.34	1.25	36.59	-4.50
Magdads Ltd	Eaag	Agri.	26.48	15.15	5.95	8.00	22.00	30.60			17.70	10.43	0.59	30.60	5.95
George Williamson Kenya Ltd*	GWK	Agri.	2.96	21.79	5.42	1.17	1.01	19.90	7.71	4.17	8.02	8.23	1.03	21.79	1.01
Kakuzi Ltd	Kakuzi	Agri.	5.46	8.54	8.54	4.33	13.24	10.66	10.29	5.79	8.36	3.03	0.36	13.24	4.33
Kapchorua Tea Company Ltd*	Kapch	Agri.	4.50	19.09	5.47	1.62	-2.06	18.94	10.82	7.44	8.23	7.67	0.93	19.09	-2.06
Limuru Tea Company Ltd.	Ltea	Agri.	65.44	59.60	33.57	22.85	67.19	255.24	72.38	39.70	76.99	74.19	0.96	255.24	22.85
Pejeta Ranching Ltd	Pejeta	Agri.	1.06	9.37	-0.21	-0.15	-0.40	1.39	1.02	0.35	1.55	3.23	2.08	9.37	-0.40
Rea Vipingo Plantations	Rea	Agri.	8.93	12.12	22.86	26.12					17.51	8.27	0.47	26.12	8.93
Sasini Tea & Coffee Ltd.	Sasini	Agri.	5.15	4.28	2.76	3.33	20.86	49.23	17.46	15.55	14.83	15.63	1.05	49.23	2.76
Baummann & Co Ltd	Baum	Comm	0.75	-1.66	1.07	3.79	11.91	20.31	15.87	3.95	7.00	8.01	1.14	20.31	-1.66
C&G General (K) Ltd	C&G	Comm	-11.96	-34.86	-23.74	0.16	4.94	3.25	1.96	1.52	-7.34	14.79	-2.01	4.94	-34.86
CMC Holdings	CMC	Comm	11.30	15.20	18.27	16.03	12.51	6.34	5.65	3.97	11.16	5.31	0.48	18.27	3.97
Express Kenya Ltd	Express	Comm	3.73	4.90	9.09	19.23	23.71	41.40	16.74	17.34	17.02	12.14	0.71	41.40	3.73
Hutchings Biemer Ltd	Hutch	Comm	0.69	-35.67	22.16	25.34	32.08	33.50	56.52	63.51	24.77	31.35	1.27	63.51	-35.67
Kenya Airways Ltd.*	KQ	Comm	15.70	20.19	14.37	25.30	56.55				26.42	17.38	0.66	56.55	14.37
Lonhro Motors (E.A) Ltd	Lonhro	Comm	-65.61	-4.49	21.52	36.48	31.01	13.30	25.72	71.96	16.24	39.62	2.44	71.96	-65.61
Marshalls E.A Ltd	Marsh	Comm	-21.86	2.99	5.88	6.45	9.30	46.20	14.40	3.30	8.33	18.70	2.24	46.20	-21.86
Printers and Publishers Ltd	NPP	Comm	21.20	22.38	20.61	20.37	22.26	11.49	9.42	9.56	17.16	5.87	0.34	22.38	9.42
Pearl Dry Cleaners Ltd	Pearl	Comm	-32.39	-20.42	2.45	4.11	6.89	6.06	5.30	6.03	-2.74	15.01	-5.47	6.89	-32.39
Standard Newspaper Ltd	Snews	Comm	-2.96	35.92	24.51	-9.34	6.56	43.14	59.66	-58.86	12.33	37.22	3.02	59.66	-58.86
TPS (Serena Ltd)	TPS	Comm	11.82	8.49	9.99						10.10	1.67	0.17	11.82	8.49
Uchumi Super Markets Ltd	Uchumi	Comm	42.37	34.59	41.45	37.20	48.61	39.14			40.56	4.85	0.12	48.61	34.59
Bank of Kenya Ltd	BBK	Financial	36.72	39.11	43.26	46.72	64.00	49.65	36.62	28.53	43.08	10.71	0.25	64.00	28.53
CFC Bank Ltd.	CFC	Financial	13.85	17.40	15.89	38.34	31.36	24.56	19.20	15.83	22.05	8.72	0.40	38.34	13.85
CTrust Ltd*	CTrust	Financial	4.25	17.19	14.24	83.51	27.07	28.91	18.61	20.75	26.82	24.15	0.90	83.51	4.25
Diamond Trust Bank Ltd	DTB	Financial	21.77	19.70	-7.18	20.26	28.30	23.26	19.76	18.04	17.99	10.64	0.59	28.30	-7.18
Housing Finance Company Of Kenya Ltd	HFCK	Financial	18.50	20.41	19.33	15.21	18.26	17.17	9.59	7.06	15.69	4.84	0.31	20.41	7.06
I.C.D.C Investments Co.	ICDC	Financial	25.70	21.13	27.92	28.24	22.91	14.60	10.42	12.03	20.37	7.13	0.35	28.24	10.42
Jubilee Insurance Company Ltd	Jubilee	Financial	4.02	4.15	3.53	3.41	3.27	4.43	11.02	5.84	4.96	2.58	0.52	11.02	3.27
Kenya Commercial Bank Ltd.	KCB	Financial	9.02	26.17	30.73	36.94	36.87	40.14	21.91	16.26	27.25	11.00	0.40	40.14	9.02
National Bank Of Kenya Ltd	NBK	Financial		11.65	15.74	12.37	8.47	6.80	14.94	17.87	12.55	3.97	0.32	17.87	6.80
NIC Bank Ltd	NIC	Financial	16.33	23.34	34.79	43.05	32.43	44.02	39.31	30.00	32.91	9.61	0.29	44.02	16.33
Pan African Insurance Co. Ltd.	Pan	Financial	3.81	3.60	2.32	1.42	5.90	2.65	3.66	3.51	3.36	1.32	0.39	5.90	1.42
Standard Chartered Bank	SCB	Financial	35.79	33.02	41.36	53.11	38.44	24.90	37.67	27.83	36.51	8.68	0.24	53.11	24.90
Athi River Mining Ltd.	Athi	Industrial	1.78	4.90	6.21						4.30	2.28	0.53	6.21	1.78
Bamburi Cement Ltd.	Bamb	Industrial	5.39	7.35	7.49	6.87	4.99	9.11	6.01	9.50	7.09	1.63	0.23	9.50	4.99
BOC Kenya Ltd	BOC	Industrial	53.29	48.98	45.35	37.28	36.06	35.14	21.78	20.93	37.35	11.78	0.32	53.29	20.93
BAT Kenya Ltd	BAT	Industrial	26.38	16.72	17.45	14.41	14.68	37.23	21.79	26.91	21.95	7.88	0.36	37.23	14.41
Carbacid Investments Ltd.*	Carb	Industrial	17.93	14.86	12.21	12.60	9.11	8.79	14.41	5.90	11.98	3.88	0.32	17.93	5.90
Crown Berger Ltd.	Berger	Industrial	4.03	7.74	0.95	8.30	21.16	22.50	14.93	7.48	10.89	7.85	0.72	22.50	0.95
Dunlop Kenya Ltd.	Dun	Industrial	5.72	8.40	23.99	33.33	32.44	40.27	36.97	21.81	25.37	12.87	0.51	40.27	5.72
E.A. Cables Ltd.	Cables	Industrial	18.23	19.61	28.53	25.03	30.48	35.04	26.56	20.84	25.54	5.80	0.23	35.04	18.23
E.A. Packaging Industries Ltd.*	EAPac	Industrial	-8.13	-10.78	1.67	12.89	18.39	26.65	31.94	26.97	12.45	16.51	1.33	31.94	-10.78
E.A. Portland Cement Ltd.*	Port	Industrial		22.10	6.40	4.86	16.53	28.06	14.29	5.21	13.92	9.02	0.65	28.06	4.86
Firestone East Africa (1969) Ltd.	Fire	Industrial	32.58	39.80	46.65	53.50	45.19	67.57			47.55	12.06	0.25	67.57	32.58
E.A. Breweries Ltd *	EAB	Industrial	13.54	1.82	9.87	5.00	2.45	7.10	19.19	13.91	9.11	6.14	0.67	19.19	1.82
Kenya National Mills Ltd*	Knmill	Industrial	-25.08	-42.19	9.00	1.72	12.15	7.63	-4.68	1.53	-4.99	18.99	-3.81	12.15	-42.19
Kenya Oil Co. Ltd.	Kenol	Industrial	18.79	20.01	16.62	16.65	48.04	26.72	14.37	5.84	20.88	12.43	0.60	48.04	5.84
Kenya Orchards Ltd.	Orchard	Industrial													
Kenya Power & Lighting Co. Ltd.	KPLC	Industrial	24.18	31.00	28.74	39.78	32.85	-25.26	4.86	8.66	18.10	21.21	1.17	39.78	-25.26
Total Kenya Ltd.	Total	Industrial	29.94	14.12	18.51	33.47	17.57	90.11	36.62	39.62	35.00	24.20	0.69	90.11	14.12
Unga Group Ltd	Unga	Industrial	-21.72	5.47	1.82	7.23	5.31	-4.59	0.84	-1.93	-0.95	9.29	-9.81	7.23	-21.72

Industrial Averages															
Agriculture			13.81	16.16	9.71	7.35	16.12	50.27	22.33	14.44	18.29	16.11	0.97	51.25	4.32
Commercial & Services			-2.09	3.66	12.89	15.43	22.20	24.01	21.13	12.23	13.92	16.30	0.39	36.35	-13.56
Financials			17.25	19.74	20.16	31.88	26.44	23.43	20.23	16.96	21.96	8.61	0.41	36.34	9.89
Industrial & Allied			12.30	12.35	16.56	19.56	21.71	25.75	17.33	14.21	17.38	10.81	-0.30	33.30	1.89
Market Average			9.87	12.54	15.26	19.32	22.08	28.93	19.78	14.55	17.74	12.63	0.27	37.94	0.26

Market Summary															
Avr			65.44	59.60	46.65	83.51	67.19	255.24	72.38	71.96	76.99	74.19	3.02	255.24	34.59
Stdev			-65.61	-42.19	-23.74	-9.34	-2.06	-25.26	-4.68	-58.86	-7.34	1.32	-9.81	4.94	-65.61
Cov			21.58	19.25	14.48	18.36	16.90	39.15	16.28	19.14	14.85	12.17	1.92	37.49	20.85
High			2.19	1.53	0.95	0.95	0.77	1.35	0.82	1.32	0.84	0.96	7.13	0.99	79.63

Industrial Summary															
Avr - Agriculture			65.44	59.60	33.57	26.12	67.19	255.24	72.38	39.70	76.99	74.19	2.08	255.24	22.85
Avr - Commercial & Services			42.37	35.92	41.45	37.20	56.55	46.20	59.66	71.96	40.56	39.62	3.02	71.96	34.59
Avr - Financials			36.72	39.11	43.26	83.51	64.00	49.65	39.31	30.00	43.08	24.15	0.90	83.51	28.53
Avr - Industrial & Allied			53.29	48.98	46.65	53.50	48.04	90.11	36.97	39.62	47.55	24.20	1.33	90.11	32.58

Industrial Summary															
Stdev - Agriculture			1.06	-4.50	-0.21	-0.15	-2.06	1.39	1.02	0.35	1.55	3.03	0.36	9.37	-4.50
Stdev - Commercial & Services			-65.61	-35.67	-23.74	-9.34	4.94	3.25	1.96	-58.86	-7.34	1.67	-5.47	4.94	-65.61
Stdev - Financials			3.81	3.60	-7.18	1.42	3.27	2.65	3.66	3.51	3.36	1.32	0.24	5.90	-7.18
Stdev - Industrial & Allied			-25.08	-42.19	0.95	1.72	2.45	-25.26	-4.68	-1.93	-4.99	1.63	-9.81	6.21	-42.19

Industrial Summary															
High - Agriculture			20.77	18.09	11.10	9.93	22.64	84.03	24.76	14.46	22.61	22.20	0.51	77.45	8.07
High - Commercial & Services			26.92	23.25	15.45	14.59	17.05	16.82	20.67	35.98	12.39	12.51	2.17	23.21	30.26
High - Financials			11.92	10.40	15.91	23.50	16.76	15.41	11.84	8.88	12.10	5.91	0.19	22.65	9.94
High - Industrial & Allied			20.16	20.10	14.10	15.50	14.24	27.31	12.45	11.51	13.86	6.48	2.69	22.55	18.27

Industrial Summary															
Low - Agriculture			1.50	1.12	1.14	1.35	1.40	1.67	1.11	1.00	1.24	1.38	0.53	1.51	1.87
Low - Commercial & Services			-12.86	6.36	1.20	0.95	0.77	0.70	0.98	2.94	0.89	0.77	5.52	0.64	-2.23
Low - Financials			0.69	0.53	0.79	0.74	0.63	0.66	0.59	0.52	0.55	0.69	0.45	0.62	1.01
Low - Industrial & Allied			1.64	1.63	0.85	0.79	0.66	1.06	0.72	0.81	0.80	0.60	-9.06	0.68	9.66

Returns (Accounting) From Amount Invested in All Assets(%)

Company	Sector	1998	1997	1996	1995	1994	1993	1992	1991
Brooke Bond Kenya Ltd	Agric.	7.77	6.32	3.63	2.99	9.42	30.79	33.83	27.69
Eaagads Ltd	Agric.	33.54	20.85	6.83	7.01	37.47	44.17		
George Williamson Kenya Ltd*	Agric.	3.19	25.31	8.15	4.91	4.66	26.59	12.88	4.36
Kakuzi Ltd	Agric.	6.70	13.24	9.65	6.44	16.69	20.23	9.09	5.25
Kapchorua Tea Company Ltd*	Agric.	3.41	20.88	5.68	2.40	-1.40	25.28	18.90	10.42
Limuru Tea Company Ltd	Agric.	59.79	65.21	38.43	25.56	41.08	119.68	65.27	40.73
OI Pejeta Ranching Ltd	Agric.	2.05	2.67	0.87	4.18	3.44	4.21	3.68	2.45
Rea Vipingo Plantations	Agric.	9.69	12.33	17.91	15.44				
Sasini Tea & Coffee Ltd	Agric.	8.31	6.98	4.35	6.85	26.37	69.97	25.44	23.66
A. Baumann & Co Ltd	Comm	0.96	-0.45	-2.35	5.31	15.55	9.87	6.73	4.95
Car & General (K) Ltd	Comm	10.71	6.19	-5.47	4.84	7.72	7.25	6.33	6.09
CMC Holdings	Comm	11.91	13.01	14.00	8.79	8.60	3.76	3.43	3.62
Express Kenya Ltd	Comm	6.68	7.52	5.25	11.84	13.71	24.64	10.68	10.05
Hutchings Biemer Ltd	Comm	-6.25	-10.48	2.27	4.60	4.72	0.75	2.18	0.81
Kenya Airways Ltd	Comm	6.14	11.04	12.76	18.28				
Lonhor Motors (E.A) Ltd	Comm	-1.75	3.51	13.50	18.62	21.39	12.84	10.58	30.84
Marshalls E.A Ltd	Comm	-4.57	6.62	9.06	12.71	14.78	8.87	8.80	8.29
Nation Media Group Ltd	Comm	26.76	26.22	23.24	26.28	25.36	18.47	15.85	15.03
Pearl Dry Cleaners Ltd	Comm	-18.01	-12.65	2.40	6.54	8.83	6.70	6.62	6.97
The Standard Newspaper Ltd	Comm	6.46	20.63	13.12	-1.61	10.60	-5.60	6.59	-7.92
TPS (Serena Ltd)	Comm	11.97	12.32	25.67					
Uchumi Super Markets Ltd	Comm	27.79	24.25	23.77	23.35	26.85	45.18		
Barclays Bank of Kenya Ltd	Financial	6.48	7.02	7.33	7.17	8.27	6.90	4.73	4.12
CFC Bank Ltd	Financial	6.22	7.55	5.69	7.65	9.06	4.73	4.50	3.46
City Trust Ltd	Financial	5.14	19.64	19.28	56.49	13.42	16.82	22.94	23.61
Diamond Trust Bank Ltd	Financial	3.03	-3.98	-1.47	5.38	6.24	6.32	4.83	4.92
Housing Finance Company of Kenya Ltd	Financial	3.74	5.73	5.86	4.38	5.49	5.02	3.05	2.02
I.C.D.C Investments Co.	Financial	22.48	17.79	21.79	24.08	20.28	12.95	10.49	12.68
Jubilee Insurance Company Ltd	Financial	4.14	4.85	4.86	4.28	4.73	5.07	4.00	6.16
Kenya Commercial Bank Ltd	Financial	1.85	7.09	6.40	6.35	5.70	6.32	3.33	2.97
National Bank of Kenya Ltd	Financial	-2.76	2.34	4.23	3.54	2.82	1.28	1.92	2.55
NIC Bank Ltd	Financial	5.68	7.77	8.72	10.39	8.88	9.69	5.24	3.98
Pan African Insurance Co. Ltd	Financial	4.92	4.30	3.72	1.95	5.98	3.80	3.99	2.64
Standard Chartered Bank	Financial	6.48	5.54	6.08	6.65	4.63	307.00	4.88	3.96
Athi River Mining Ltd	Industrial	5.07	9.15	13.42					
Bamburi Cement Ltd	Industrial	5.02	12.93	13.25	16.85	11.96	14.69	14.40	11.47
BOC Kenya Ltd	Industrial	20.07	19.14	16.37	14.74	14.97	12.35	12.73	12.25
BAT Kenya Ltd	Industrial	29.19	18.67	20.21	16.80	18.05	36.88	26.16	22.11
Carbacid Investments Ltd*	Industrial	27.10	23.91	20.86	19.78	13.31	17.00	18.96	8.63
Crown Berger Ltd	Industrial	11.48	12.97	8.69	13.38	24.39	22.29	18.85	20.47
Dunlop Kenya Ltd	Industrial	7.40	9.66	27.45	40.81	42.52	48.15	41.59	23.89
E.A Cables Ltd	Industrial	28.48	30.48	36.48	31.71	40.78	46.64	32.53	25.55
E.A Packaging Industries Ltd*	Industrial	3.84	2.93	7.59	14.24	16.61	26.02	26.97	25.03
E.A Portland Cement Ltd*	Industrial	-19.94	11.71	2.81	2.34	3.51	16.26	10.28	9.24
Firestone East Africa (1969) Ltd	Industrial	35.77	40.51	50.48	55.83	52.79	128.38		
E.A Breweries Ltd*	Industrial	11.91	6.29	11.90	10.90	7.45	17.01	12.60	13.46
Kenya National Mills Ltd*	Industrial	-1.98	-10.65	13.45	5.24	14.97	14.27	-1.08	4.75
Kenya Oil Co. Ltd	Industrial	21.84	25.18	21.08	19.66	39.57	15.47	8.27	7.63
Kenya Orchards Ltd	Industrial								
Kenya Power & Lighting Co. Ltd	Industrial	10.46	11.85	9.68	12.59	8.81	-1.41	4.93	4.37
Total Kenya Ltd	Industrial	20.24	13.90	17.06	25.48	22.60	43.49	15.92	18.94
Unga Group Ltd	Industrial	-7.74	13.83	5.23	13.36	12.37	4.49	2.72	-0.30

APPENDIX 4:

RESULTS OF REGRESSION

```
MTB > # Opening worksheet from file: A:\AVERDA.XLS
MTB > # File was last modified on 7/21/100
MTB > Name c9 = 'SRES1' c10 = 'FITS1' c11 = 'RESI1' c12 = 'COEF1' &
CONT>    c13 = 'TRES1'
MTB > Regress 'DPOR' 1 'CARoE';
SUBC>  SResiduals 'SRES1';
SUBC>  Fits 'FITS1';
SUBC>  Constant;
SUBC>  Residuals 'RESI1';
SUBC>  Coefficients 'COEF1';
SUBC>  Tresiduals 'TRES1'.
```

Regression Analysis

The regression equation is
DPOR = 53.3 - 3.36 CARoE

51 cases used 1 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	53.268	9.043	5.89	0.000
CARoE	-3.361	3.418	-0.98	0.330

s = 26.55 R-sq = 1.9% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	681.8	681.8	0.97	0.330
Error	49	34550.2	705.1		
Total	50	35231.9			

Unusual Observations

Obs.	CARoE	DPOR	Fit	Stdev.Fit	Residual	St.Resid
2	4.00	-16.49	39.82	6.58	-56.31	-2.19R
9	3.00	116.11	43.19	4.23	72.92	2.78R
12	3.00	98.27	43.19	4.23	55.09	2.10R
51	3.00	114.26	43.19	4.23	71.08	2.71R

R denotes an obs. with a large st. resid.

```
MTB > Name c14 = 'SRES2' c15 = 'FITS2' c16 = 'RESI2' c17 = 'COEF2' &
```

APPENDIX 4:

```
CONT> c18 = 'TRES2'
MTB > Regress 'DPOR' 1 'CARoA';
SUBC> SResiduals 'SRES2';
SUBC> Fits 'FITS2';
SUBC> Constant;
SUBC> Residuals 'RESI2';
SUBC> Coefficients 'COEF2';
SUBC> Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is
DPOR = 69.0 - 9.63 CARoA

51 cases used 1 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	68.961	8.379	8.23	0.000
CARoA	-9.633	3.094	-3.11	0.003

s = 24.50 R-sq = 16.5% R-sq(adj) = 14.8%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	5818.7	5818.7	9.69	0.003
Error	49	29413.2	600.3		
Total	50	35231.9			

Unusual Observations

Obs.	CARoA	DPOR	Fit	Stdev.Fit	Residual	St.Resid
9	2.00	116.11	49.70	3.73	66.41	2.74R
12	2.00	98.27	49.70	3.73	48.58	2.01R
51	2.00	114.26	49.70	3.73	64.57	2.67R

R denotes an obs. with a large st. resid.

```
MTB > Name c19 = 'SRES3' c20 = 'FITS3' c21 = 'RESI3' c22 = 'COEF3' &
CONT> c23 = 'TRES3'
MTB > Regress 'DPOR' 1 'CAgIA';
SUBC> SResiduals 'SRES3';
SUBC> Fits 'FITS3';
SUBC> Constant;
SUBC> Residuals 'RESI3';
SUBC> Coefficients 'COEF3';
```

APPENDIX 4:

SUBC> Tresiduals 'TRES3'.

Regression Analysis

The regression equation is
DPOR = 40.9 + 1.71 CAgIA

51 cases used 1 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	40.935	9.146	4.48	0.000
CAgIA	1.711	3.377	0.51	0.615

s = 26.74 R-sq = 0.5% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	183.6	183.6	0.26	0.615
Error	49	35048.4	715.3		
Total	50	35231.9			

Unusual Observations

Obs.	CAgIA	DPOR	Fit	Stdev.Fit	Residual	St.Resid
2	1.00	-16.49	42.65	6.22	-59.14	-2.27R
9	1.00	116.11	42.65	6.22	73.46	2.82R
12	1.00	98.27	42.65	6.22	55.63	2.14R
51	4.00	114.26	47.78	6.38	66.49	2.56R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA92.XLS
MTB > # File was last modified on 7/21/100
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESI1' c13 = 'COEF1' &
CONT> c14 = 'TRES1'
MTB > Regress 'DPOR92' 1 'CgToAs92';
SUBC> SResiduals 'SRES1';
SUBC> Fits 'FITS1';
SUBC> Constant;
SUBC> Residuals 'RESI1';
SUBC> Coefficients 'COEF1';
SUBC> Tresiduals 'TRES1'.
```

Regression Analysis



APPENDIX 4:

The regression equation is
DPOR92 = 46.3 - 1.72 CgToAs92

44 cases used 46 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	46.267	9.937	4.66	0.000
CgToAs92	-1.721	3.714	-0.46	0.646

s = 27.49 R-sq = 0.5% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	162.2	162.2	0.21	0.646
Error	42	31742.6	755.8		
Total	43	31904.8			

Unusual Observations

Obs.	CgToAs92	DPOR92	Fit	Stdev.Fit	Residual	St.Resid
1	1.00	99.80	44.55	6.74	55.25	2.07R
12	2.00	99.63	42.83	4.44	56.80	2.09R
44	3.00	-14.92	41.11	4.65	-56.03	-2.07R

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &  
CONT>    c19 = 'TRES2'  
MTB > Regress 'DPOR92' 1 'CReOnAs9';  
SUBC> SResiduals 'SRES2';  
SUBC> Fits 'FITS2';  
SUBC> Constant;  
SUBC> Residuals 'RESI2';  
SUBC> Coefficients 'COEF2';  
SUBC> Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is
DPOR92 = 61.2 - 7.66 CReOnAs9

44 cases used 46 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
-----------	------	-------	---------	---

APPENDIX 4:

Constant	61.246	9.649	6.35	0.000
CReOnAs9	-7.665	3.523	-2.18	0.035

s = 26.13 R-sq = 10.1% R-sq(adj) = 8.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	3231.2	3231.2	4.73	0.035
Error	42	28673.6	682.7		
Total	43	31904.8			

Unusual Observations

Obs.	CReOnAs9	DPOR92	Fit	Stdev.Fit	Residual	St.Resid
12	2.00	99.63	45.92	4.32	53.71	2.08R

R denotes an obs. with a large st. resid.

MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'COEF3' &
CONT> c24 = 'TRES3'

MTB > Regress 'DPOR92' 1 'CREToEQ9';

SUBC> SResiduals 'SRES3';

SUBC> Fits 'FITS3';

SUBC> Constant;

SUBC> Residuals 'RESI3';

SUBC> Coefficients 'COEF3';

SUBC> Tresiduals 'TRES3'.

Regression Analysis

The regression equation is

DPOR92 = 55.4 - 5.32 CREToEQ9

44 cases used 46 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	55.385	9.926	5.58	0.000
CREToEQ9	-5.321	3.625	-1.47	0.150

s = 26.88 R-sq = 4.9% R-sq(adj) = 2.6%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	1556.9	1556.9	2.15	0.150

APPENDIX 4:

Error	42	30347.9	722.6
Total	43	31904.8	

Unusual Observations

Obs.	CREToEQ9	DPOR92	Fit	Stdev.Fit	Residual	St.Resid
12	2.00	99.63	44.74	4.44	54.88	2.07R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA93-1.XLS
MTB > # File was last modified on 7/21/100
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESII' c13 = 'COEF1' &
CONT>    c14 = 'TRES1'
MTB > Regress 'DPOR93' 1 'CgToAs93';
SUBC>  SResiduals 'SRES1';
SUBC>  Fits 'FITS1';
SUBC>  Constant;
SUBC>  Residuals 'RESII';
SUBC>  Coefficients 'COEF1';
SUBC>  Tresiduals 'TRES1'.
```

Regression Analysis

The regression equation is
DPOR93 = 43.2 - 2.14 CgToAs93

44 cases used 46 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	43.171	9.472	4.56	0.000
CgToAs93	-2.138	3.459	-0.62	0.540

s = 25.65 R-sq = 0.9% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	251.5	251.5	0.38	0.540
Error	42	27632.9	657.9		
Total	43	27884.3			

Unusual Observations

Obs.	CgToAs93	DPOR93	Fit	Stdev.Fit	Residual	St.Resid
1	1.00	99.73	41.03	6.47	58.70	2.36R
30	1.00	91.07	41.03	6.47	50.04	2.02R

APPENDIX 4:

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &
CONT>    c19 = 'TRES2'
MTB > Regress 'DPOR93' 1 'CReOnAS9';
SUBC>  SResiduals 'SRES2';
SUBC>  Fits 'FITS2';
SUBC>  Constant;
SUBC>  Residuals 'RESI2';
SUBC>  Coefficients 'COEF2';
SUBC>  Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is
DPOR93 = 49.4 - 4.27 CReOnAS9

47 cases used 43 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	49.436	9.048	5.46	0.000
CReOnAS9	-4.266	3.344	-1.28	0.209

s = 25.40 R-sq = 3.5% R-sq(adj) = 1.3%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	1050.2	1050.2	1.63	0.209
Error	45	29041.4	645.4		
Total	46	30091.6			

Unusual Observations

Obs.	CReOnAS9	DPOR93	Fit	Stdev.Fit	Residual	St.Resid
1	1.00	99.73	45.17	6.15	54.56	2.21R

R denotes an obs. with a large st. resid.

```
MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'COEF3' &
CONT>    c24 = 'TRES3'
MTB > Regress 'DPOR93' 1 'CREToEQ9';
SUBC>  SResiduals 'SRES3';
SUBC>  Fits 'FITS3';
SUBC>  Constant;
```

APPENDIX 4:

```
SUBC> Residuals 'RESI3';  
SUBC> Coefficients 'COEF3';  
SUBC> Tresiduals 'TRES3'.
```

Regression Analysis

The regression equation is
 $DPOR93 = 40.2 - 0.54 \text{ CREToEQ9}$

47 cases used 43 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	40.247	9.207	4.37	0.000
CREToEQ9	-0.543	3.403	-0.16	0.874

$s = 25.85$ $R\text{-sq} = 0.1\%$ $R\text{-sq}(\text{adj}) = 0.0\%$

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	17.0	17.0	0.03	0.874
Error	45	30074.6	668.3		
Total	46	30091.6			

Unusual Observations

Obs.	CREToEQ9	DPOR93	Fit	Stdev.Fit	Residual	St.Resid
1	1.00	99.73	39.70	6.26	60.03	2.39R
30	3.00	91.07	38.62	4.18	52.46	2.06R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA94.XLS  
MTB > # File was last modified on 7/21/100  
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESI1' c13 = 'COEF1' &  
CONT> c14 = 'TRES1'  
MTB > Regress 'DPOR94' 1 'CgToAs94';  
SUBC> SResiduals 'SRES1';  
SUBC> Fits 'FITS1';  
SUBC> Constant;  
SUBC> Residuals 'RESI1';  
SUBC> Coefficients 'COEF1';  
SUBC> Tresiduals 'TRES1'.
```

Regression Analysis

APPENDIX 4:

The regression equation is
DPOR94 = 29.9 + 4.69 CgToAs94

47 cases used 43 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	29.85	13.14	2.27	0.028
CgToAs94	4.688	4.857	0.97	0.340

s = 36.90 R-sq = 2.0% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	1268	1268	0.93	0.340
Error	45	61257	1361		
Total	46	62526			

Unusual Observations

Obs.	CgToAs94	DPOR94	Fit	Stdev.Fit	Residual	St.Resid
45	3.00	143.57	43.92	5.97	99.65	2.74R
47	3.00	-88.40	43.92	5.97	-132.32	-3.63R
48	4.00	-42.98	48.61	9.18	-91.59	-2.56R

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &  
CONT>    c19 = 'TRES2'  
MTB > Regress 'DPOR94' 1 'CReOnAs9';  
SUBC>    SResiduals 'SRES2';  
SUBC>    Fits 'FITS2';  
SUBC>    Constant;  
SUBC>    Residuals 'RESI2';  
SUBC>    Coefficients 'COEF2';  
SUBC>    Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is
DPOR94 = 67.8 - 10.7 CReOnAs9

47 cases used 43 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
-----------	------	-------	---------	---

APPENDIX 4:

Constant	67.76	12.56	5.40	0.000
CReOnAs9	-10.670	4.642	-2.30	0.026

s = 35.26 R-sq = 10.5% R-sq(adj) = 8.5%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	6569	6569	5.28	0.026
Error	45	55957	1243		
Total	46	62526			

Unusual Observations

Obs.	CReOnAs9	DPOR94	Fit	Stdev.Fit	Residual	St.Res
45	3.00	143.57	35.75	5.71	107.82	3.10R
47	4.00	-88.40	25.08	8.78	-113.48	-3.32R

R denotes an obs. with a large st. resid.

```
MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'C
CONT>    c24 = 'TRES3'
MTB > Regress 'DPOR94' 1 'CREToEQ9';
SUBC>    SResiduals 'SRES3';
SUBC>    Fits 'FITS3';
SUBC>    Constant;
SUBC>    Residuals 'RESI3';
SUBC>    Coefficients 'COEF3';
SUBC>    Tresiduals 'TRES3'.
```

Regression Analysis

The regression equation is
 DPOR94 = 51.4 - 4.33 CREToEQ9

48 cases used 42 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	51.40	13.09	3.93	0.000
CREToEQ9	-4.333	4.781	-0.91	0.369

s = 37.03 R-sq = 1.8% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
--------	----	----	----	---	---

APPENDIX 4:

Regression	1	1127	1127	0.82	0.369
Error	46	63079	1371		
Total	47	64206			

Unusual Observations

Obs.	CREToEQ9	DPOR94	Fit	Stdev.Fit	Residual	St.Resid
45	4.00	143.57	34.06	8.94	109.51	3.05R
47	4.00	-88.40	34.06	8.94	-122.46	-3.41R
48	4.00	-42.98	34.06	8.94	-77.04	-2.14R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA95.XLS
MTB > # File was last modified on 7/21/100
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESI1' c13 = 'COEF1' &
CONT> c14 = 'TRES1'
MTB > Regress 'DPOR95' 1 'CgToAs95';
SUBC> SResiduals 'SRES1';
SUBC> Fits 'FITS1';
SUBC> Constant;
SUBC> Residuals 'RESI1';
SUBC> Coefficients 'COEF1';
SUBC> Tresiduals 'TRES1'.
```

Regression Analysis

The regression equation is
DPOR95 = - 1.3 + 21.0 CgToAs95

48 cases used 42 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	-1.29	19.28	-0.07	0.947
CgToAs95	20.952	7.191	2.91	0.005

s = 55.61 R-sq = 15.6% R-sq(adj) = 13.7%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	26257	26257	8.49	0.005
Error	46	142260	3093		
Total	47	168517			

Unusual Observations

APPENDIX 4:

Obs.	CgToAs95	DPOR95	Fit	Stdev.Fit	Residual	St.Resid
42	3.00	207.23	61.57	8.99	145.66	2.65R
47	4.00	210.28	82.52	13.81	127.76	2.37R
48	1.00	-240.17	19.67	13.09	-259.84	-4.81R

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &
CONT>    c19 = 'TRES2'
MTB > Regress 'DPOR95' 1 'CReOnAs9';
SUBC>  SResiduals 'SRES2';
SUBC>  Fits 'FITS2';
SUBC>  Constant;
SUBC>  Residuals 'RESI2';
SUBC>  Coefficients 'COEF2';
SUBC>  Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is
DPOR95 = 51.6 - 0.95 CReOnAs9

49 cases used 41 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	51.63	20.31	2.54	0.014
CReOnAs9	-0.947	7.777	-0.12	0.904

s = 59.93 R-sq = 0.0% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	53	53	0.01	0.904
Error	47	168831	3592		
Total	48	168884			

Unusual Observations

Obs.	CReOnAs9	DPOR95	Fit	Stdev.Fit	Residual	St.Resid
42	3.00	207.23	48.79	9.88	158.44	2.68R
47	3.00	210.28	48.79	9.88	161.49	2.73R
48	4.00	-240.17	47.84	15.31	-288.01	-4.97R

R denotes an obs. with a large st. resid.

APPENDIX 4:

```
MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'COEF3' &
CONT>    c24 = 'TRES3'
MTB > Regress 'DPOR95' 1 'CREToEQ9';
SUBC>  SResiduals 'SRES3';
SUBC>  Fits 'FITS3';
SUBC>  Constant;
SUBC>  Residuals 'RESI3';
SUBC>  Coefficients 'COEF3';
SUBC>  Tresiduals 'TRES3'.
```

Regression Analysis

The regression equation is
DPOR95 = 33.8 + 6.42 CREToEQ9

49 cases used 41 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	33.80	20.50	1.65	0.106
CREToEQ9	6.419	7.682	0.84	0.408

s = 59.50 R-sq = 1.5% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	2472	2472	0.70	0.408
Error	47	166412	3541		
Total	48	168884			

Unusual Observations

Obs.	CREToEQ9	DPOR95	Fit	Stdev.Fit	Residual	St.Resid
42	4.00	207.23	59.48	14.76	147.75	2.56R
47	4.00	210.28	59.48	14.76	150.80	2.62R
48	4.00	-240.17	59.48	14.76	-299.65	-5.20R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA96-2.XLS
MTB > # File was last modified on 9/22/100
MTB > # Opening worksheet from file: A:\DATA97.XLS
MTB > # File was last modified on 7/21/100
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESI1' c13 = 'COEF1' &
CONT>    c14 = 'TRES1'
MTB > Regress 'DPOR97' 1 'CgToAs97';
```

APPENDIX 4:

```
SUBC> SResiduals 'SRES1';
SUBC> Fits 'FITS1';
SUBC> Constant;
SUBC> Residuals 'RESI1';
SUBC> Coefficients 'COEF1';
SUBC> Tresiduals 'TRES1'.
```

Regression Analysis

The regression equation is
 $DPOR97 = 50.9 - 2.02 \text{ CgToAs97}$

51 cases used 40 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	50.87	15.80	3.22	0.002
CgToAs97	-2.017	5.897	-0.34	0.734

s = 47.37 R-sq = 0.2% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	262	262	0.12	0.734
Error	49	109935	2244		
Total	50	110197			

Unusual Observations

Obs.	CgToAs97	DPOR97	Fit	Stdev.Fit	Residual	St.Resid
43	2.00	302.25	46.83	7.10	255.42	5.45R

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &
CONT>    c19 = 'TRES2'
MTB > Regress 'DPOR97' 1 'CReOnAs9';
SUBC> SResiduals 'SRES2';
SUBC> Fits 'FITS2';
SUBC> Constant;
SUBC> Residuals 'RESI2';
SUBC> Coefficients 'COEF2';
SUBC> Tresiduals 'TRES2'.
```

Regression Analysis

APPENDIX 4:

The regression equation is
 $DPOR97 = 62.8 - 6.75 \text{ CReOnAs9}$

51 cases used 40 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	62.76	15.89	3.95	0.000
CReOnAs9	-6.745	5.814	-1.16	0.252

$s = 46.78$ $R\text{-sq} = 2.7\%$ $R\text{-sq}(\text{adj}) = 0.7\%$

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	2946	2946	1.35	0.252
Error	49	107251	2189		
Total	50	110197			

Unusual Observations

Obs.	CReOnAs9	DPOR97	Fit	Stdev.Fit	Residual	St.Resid
43	3.00	302.25	42.53	7.19	259.73	5.62R

R denotes an obs. with a large st. resid.

```
MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'COEF3' &  
CONT>    c24 = 'TRES3'  
MTB > Regress 'DPOR97' 1 'CREToEQ9';  
SUBC>    SResiduals 'SRES3';  
SUBC>    Fits 'FITS3';  
SUBC>    Constant;  
SUBC>    Residuals 'RESI3';  
SUBC>    Coefficients 'COEF3';  
SUBC>    Tresiduals 'TRES3'.
```

Regression Analysis

The regression equation is
 $DPOR97 = 51.8 - 2.41 \text{ CREToEQ9}$

51 cases used 40 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	51.78	15.91	3.25	0.002
CREToEQ9	-2.410	5.996	-0.40	0.690

APPENDIX 4:

s = 47.34 R-sq = 0.3% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	362	362	0.16	0.690
Error	49	109835	2242		
Total	50	110197			

Unusual Observations

Obs.	CREToEQ9	DPOR97	Fit	Stdev.Fit	Residual	St.Resid
43	4.00	302.25	42.14	11.60	260.11	5.67R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA96-2.XLS
MTB > # File was last modified on 7/21/100
MTB > # Opening worksheet from file: A:\DATA96.XLS
MTB > # File was last modified on 7/21/100
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESI1' c13 = 'COEF1' &
CONT> c14 = 'TRES1'
MTB > Regress 'DivPayRa' 1 'CgToAsse';
SUBC> SResiduals 'SRES1';
SUBC> Fits 'FITS1';
SUBC> Constant;
SUBC> Residuals 'RESI1';
SUBC> Coefficients 'COEF1';
SUBC> Tresiduals 'TRES1'.
```

Regression Analysis

The regression equation is
DivPayRa = 62.2 - 5.06 CgToAsse

49 cases used 41 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	62.19	20.80	2.99	0.004
CgToAsse	-5.063	7.662	-0.66	0.512

s = 60.43 R-sq = 0.9% R-sq(adj) = 0.0%

Analysis of Variance

APPENDIX 4:

SOURCE	DF	SS	MS	F	p
Regression	1	1594	1594	0.44	0.512
Error	47	171642	3652		
Total	48	173237			

Unusual Observations

Obs.	CgToAsse	DivPayRa	Fit	Stdev.Fit	Residual	St.Resid
48	2.00	406.75	52.06	9.35	354.69	5.94R

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &
CONT> c19 = 'TRES2'
MTB > Regress 'DivPayRa' 1 'CReOnAs9';
SUBC> SResiduals 'SRES2';
SUBC> Fits 'FITS2';
SUBC> Constant;
SUBC> Residuals 'RESI2';
SUBC> Coefficients 'COEF2';
SUBC> Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is
DivPayRa = 71.7 - 7.73 CReOnAs9

51 cases used 39 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	71.66	20.96	3.42	0.001
CReOnAs9	-7.725	7.772	-0.99	0.325

s = 62.48 R-sq = 2.0% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	3857	3857	0.99	0.325
Error	49	191280	3904		
Total	50	195137			

Unusual Observations

Obs.	CReOnAs9	DivPayRa	Fit	Stdev.Fit	Residual	St.Resid
28	1.00	199.15	63.94	14.27	135.21	2.22R
48	3.00	406.75	48.49	9.73	358.26	5.80R

APPENDIX 4:

R denotes an obs. with a large st. resid.

```
MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'COEF3' &
CONT> c24 = 'TRES3'
MTB > Regress 'DivPayRa' 1 'CREToEQ9';
SUBC> SResiduals 'SRES3';
SUBC> Fits 'FITS3';
SUBC> Constant;
SUBC> Residuals 'RESI3';
SUBC> Coefficients 'COEF3';
SUBC> Tresiduals 'TRES3'.
```

Regression Analysis

The regression equation is
DivPayRa = 43.3 + 3.86 CREToEQ9

51 cases used 39 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	43.34	21.00	2.06	0.044
CREToEQ9	3.863	7.838	0.49	0.624

s = 62.95 R-sq = 0.5% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	963	963	0.24	0.624
Error	49	194174	3963		
Total	50	195137			

Unusual Observations

Obs.	CREToEQ9	DivPayRa	Fit	Stdev.Fit	Residual	St.Resid
28	3.00	199.15	54.93	9.88	144.22	2.32R
48	4.00	406.75	58.79	15.13	347.96	5.69R
50	4.00	-69.52	58.79	15.13	-128.31	-2.10R

R denotes an obs. with a large st. resid.

```
MTB > # Opening worksheet from file: A:\DATA98-2.XLS
MTB > # File was last modified on 9/26/100
MTB >
```

APPENDIX 4:

```
MTB > # Opening worksheet from file: A:\DATA98.XLS
MTB > # File was last modified on 9/26/100
MTB > Name c10 = 'SRES1' c11 = 'FITS1' c12 = 'RESI1' c13 = 'COEF1' &
CONT>    c14 = 'TRES1'
MTB > Regress 'DPOR98' 1 'CARoE8';
SUBC>  SResiduals 'SRES1';
SUBC>  Fits 'FITS1';
SUBC>  Constant;
SUBC>  Residuals 'RESI1';
SUBC>  Coefficients 'COEF1';
SUBC>  Tresiduals 'TRES1'.
```

Regression Analysis

The regression equation is
DPOR98 = 68.6 - 11.8 CARoE8

51 cases used 1 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	68.63	10.17	6.75	0.000
CARoE8	-11.762	3.662	-3.21	0.002

s = 29.91 R-sq = 17.4% R-sq(adj) = 15.7%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	9227.8	9227.8	10.31	0.002
Error	49	43839.0	894.7		
Total	50	53066.8			

Unusual Observations

Obs.	CARoE8	DPOR98	Fit	Stdev.Fit	Residual	St.Resid
16	3.00	95.40	33.35	4.53	62.05	2.10R
20	3.00	93.69	33.35	4.53	60.35	2.04R
27	4.00	-47.59	21.58	6.82	-69.17	-2.38R
31	3.00	99.98	33.35	4.53	66.64	2.25R
43	4.00	84.88	21.58	6.82	63.30	2.17R

R denotes an obs. with a large st. resid.

```
MTB > Name c15 = 'SRES2' c16 = 'FITS2' c17 = 'RESI2' c18 = 'COEF2' &
CONT>    c19 = 'TRES2'
```



APPENDIX 4:

```
MTB > Regress 'DPOR98' 1 'CARoA8';
SUBC> SResiduals 'SRES2';
SUBC> Fits 'FITS2';
SUBC> Constant;
SUBC> Residuals 'RESI2';
SUBC> Coefficients 'COEF2';
SUBC> Tresiduals 'TRES2'.
```

Regression Analysis

The regression equation is

$$\text{DPOR98} = 62.9 - 9.96 \text{ CARoA8}$$

51 cases used 1 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	62.90	10.73	5.86	0.000
CARoA8	-9.960	4.066	-2.45	0.018

s = 31.06 R-sq = 10.9% R-sq(adj) = 9.1%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	5788.9	5788.9	6.00	0.018
Error	49	47278.0	964.9		
Total	50	53066.8			

Unusual Observations

Obs.	CARoA8	DPOR98	Fit	Stdev.Fit	Residual	St.Resid
27	2.00	-47.59	42.98	4.66	-90.57	-2.95R
31	3.00	99.98	33.02	4.96	66.96	2.18R
43	4.00	84.88	23.06	7.79	61.82	2.06R

R denotes an obs. with a large st. resid.

```
MTB > Name c20 = 'SRES3' c21 = 'FITS3' c22 = 'RESI3' c23 = 'COEF3' &
CONT> c24 = 'TRES3'
MTB > Regress 'DPOR98' 1 'CAgIA8';
SUBC> SResiduals 'SRES3';
SUBC> Fits 'FITS3';
SUBC> Constant;
SUBC> Residuals 'RESI3';
SUBC> Coefficients 'COEF3';
SUBC> Tresiduals 'TRES3'.
```

APPENDIX 4:

Regression Analysis

The regression equation is
DPOR98 = 43.2 - 1.59 CAgIA8

51 cases used 1 cases contain missing values

Predictor	Coef	Stdev	t-ratio	p
Constant	43.17	11.98	3.60	0.001
CAgIA8	-1.586	4.089	-0.39	0.700

s = 32.86 R-sq = 0.3% R-sq(adj) = 0.0%

Analysis of Variance

SOURCE	DF	SS	MS	F	p
Regression	1	162	162	0.15	0.700
Error	49	52904	1080		
Total	50	53067			

Unusual Observations

Obs.	CAgIA8	DPOR98	Fit	Stdev.Fit	Residual	St.Resid
27	1.00	-47.59	41.59	8.36	-89.18	-2.81R

R denotes an obs. with a large st. resid.

MTB > Stop.

Company	Sec	DPOR92	gToAs92	ReOnAs92	REToEQ92	CgToAs92	CReOnAs92	CREToEQ92
Timuru Tea Company Ltd.	1	99.80	33.51	65.27	72.38	1	1	1
The Standard Newspaper Ltd	2	0.00	-9.81	6.59	59.66	4	3	1
Hutchings Biemer Ltd	2	14.88	-8.69	2.18	56.52	4	4	1
IC Bank Ltd	3	27.65	13.76	5.24	39.31	2	3	1
Standard Chartered Bank	3	46.19	17.21	4.88	37.67	2	3	1
Unloper Kenya Ltd.	4	27.17	29.00	41.59	36.97	2	1	1
Barclays Bank of Kenya Ltd	3	66.00	21.99	4.73	36.62	2	3	1
Postal Kenya Ltd.	4	72.26	34.72	15.92	36.62	1	2	1
Brooke Bond Kenya Ltd.	1	84.62	7.10	33.83	36.59	3	1	1
A. Packaging Industries Ltd.*	4	41.57	38.58	26.97	31.94	1	1	1
A. Cables Ltd.	4	53.31	9.68	32.53	26.56	3	1	1
Onhro Motors (E.A) Ltd	2	99.63	17.07	10.58	25.72	2	2	2
Kenya Commercial Bank Ltd.	3	37.73	15.02	3.33	21.91	2	4	2
AT Kenya Ltd	4	79.33	54.97	26.16	21.79	1	1	2
OC Kenya Ltd	4	53.69	0.92	12.73	21.78	4	2	2
Diamond Trust Bank Ltd	3	46.64	17.69	4.83	19.76	2	3	2
FC Bank Ltd.	3	26.90	27.60	4.50	19.20	2	4	2
A. Breweries Ltd.*	4	48.61	29.69	12.60	19.19	2	2	2
City Trust Ltd*	3	22.29	11.41	22.94	18.61	3	1	2
Sasini Tea & Coffee Ltd.	1	67.65	-1.85	25.44	17.46	4	1	2
Express Kenya Ltd	2	58.01	-14.36	10.68	16.74	4	2	2
A. Baumann & Co Ltd	2	0.47	9.32	6.73	15.87	3	3	2
National Bank Of Kenya Ltd	3	28.55	10.35	1.92	14.94	3	4	3
Crown Berger Ltd.	4	74.66	195.54	18.85	14.93	1	1	3
Carbacid Investments Ltd.*	4	23.12	13.48	18.96	14.41	3	1	3
Marshalls E.A Ltd	2	8.47	8.66	8.80	14.40	3	3	3
Kenya Oil Co. Ltd.	4	31.61	55.68	8.27	14.37	1	3	3
E.A. Portland Cement Ltd.*	4	9.84	62.53	10.28	14.29	1	2	3
Jubilee Insurance Company Ltd	3	31.81	13.64	4.00	11.02	3	4	3
Lapchorua Tea Company Ltd*	1	6.12	87.00	18.90	10.82	1	1	3
C.D.C Investments Co.	3	88.26	4.83	10.49	10.42	4	2	3
Lakuzi Ltd	1	33.74	13.42	9.09	10.29	3	2	3
Housing Finance Company Of Kenya Ltd	3	51.72	21.00	3.05	9.59	2	4	3
Nation Printers and Publishers Ltd	2	44.63	25.71	15.85	9.42	2	2	4
George Williamson Kenya Ltd*	1	13.78	76.50	12.88	7.71	1	2	4
Mamburi Cement Ltd.	4	18.25	186.58	14.40	6.01	1	2	4
MMC Holdings	2	29.29	-9.97	3.43	5.65	4	4	4
Pearl Dry Cleaners Ltd	2	59.36	4.12	6.62	5.30	4	3	4
Kenya Power & Lighting Co. Ltd.	4	35.50	6.47	4.93	4.86	3	3	4
Pan African Insurance Co. Ltd.	3	28.98	34.84	3.99	3.66	1	4	4
Car & General (K) Ltd	2	56.85	-2.33	6.33	1.96	4	3	4
Ol Pejeta Ranching Ltd	1	45.41	-0.36	3.68	1.02	4	4	4
Anga Group Ltd	4	72.26	50.49	2.72	0.84	1	4	4
Kenya Natoinal Mills Ltd*	4	-14.92	5.81	-1.08	-4.68	3	4	4
Kenya Orchards Ltd.	4		-23.89			4		
Caagads Ltd	1	-28.05						
Rea Vipingo Plantations	1							
Kenya Airways Ltd.*	2							
SPS (Serena Ltd)	2							
Wichumi Super Markets Ltd	2							
Atthi River Mining Ltd.	4							
Firestone East Africa (1969) Ltd.	4							

Company	Sec	DPOR93	gToAs93	ReOnAs93	REToEQ93	CgToAs93	CReOnAS93	CREToEQ93
Limuru Tea Company Ltd.	1	99.73	124.95	119.68	255.24	1	1	1
Total Kenya Ltd.	4	67.34	45.58	43.49	90.11	2	1	1
Firestone East Africa (1969) Ltd.	4	47.36		128.38	67.57		1	1
Barclays Bank of Kenya Ltd	3	56.14	52.45	6.90	49.65	1	3	1
Sasini Tea & Coffee Ltd.	1	30.84	83.78	69.97	49.23	1	1	1
Marshalls E.A Ltd	2	3.65	7.27	8.87	46.20	4	3	1
NIC Bank Ltd	3	33.20	20.35	9.69	44.02	3	3	1
The Standard Newspaper Ltd	2	0.00	24.33	-5.60	43.14	3	4	1
Express Kenya Ltd	2	45.95	58.13	24.64	41.40	1	2	1
Dunlop Kenya Ltd.	4	28.73	21.43	48.15	40.27	3	1	1
Kenya Commercial Bank Ltd.	3	21.10	48.89	6.32	40.14	1	3	1
Uchumi Super Markets Ltd	2	84.15		45.18	39.14		1	1
BAT Kenya Ltd	4	60.61	7.76	36.88	37.23	4	1	2
BOC Kenya Ltd	4	58.69	82.97	12.35	35.14	1	3	2
E.A. Cables Ltd.	4	48.28	26.96	46.64	35.04	2	1	2
Hutchings Biemer Ltd	2	18.24	111.01	0.75	33.50	1	4	2
Eaagads Ltd	1	32.80		44.17	30.60		1	2
City Trust Ltd*	3	33.70	29.00	16.82	28.91	2	2	2
E.A. Portland Cement Ltd.*	4	7.42	39.39	16.26	28.06	2	2	2
Kenya Oil Co. Ltd.	4	35.14	-0.36	15.47	26.72	4	2	2
E.A. Packaging Industries Ltd.*	4	0.00	18.33	26.02	26.65	3	1	2
Standard Chartered Bank	3	71.04	26.02	3.07	24.90	3	4	2
CFC Bank Ltd.	3	20.95	32.44	4.73	24.56	2	4	2
Diamond Trust Bank Ltd	3	31.24	39.01	6.32	23.26	2	3	2
Crown Berger Ltd.	4	62.97	1.36	22.29	22.50	4	2	3
A Baumann & Co Ltd	2	-3.24	26.86	9.87	20.31	3	3	3
George Williamson Kenya Ltd*	1	10.70	40.75	26.59	19.90	2	1	3
Kapchorua Tea Company Ltd*	1	7.56	17.86	25.28	18.94	3	2	3
Housing Finance Company Of Kenya Ltd	3	31.87	10.52	5.02	17.17	4	4	3
Brooke Bond Kenya Ltd.	1	91.07	263.90	30.79	16.19	1	1	3
I.C.D.C Investments Co.	3	71.21	6.90	12.95	14.60	4	3	3
Lonhro Motors (E.A) Ltd	2	75.34	23.00	12.84	13.30	3	3	3
Nation Printers and Publishers Ltd	2	31.10	14.54	18.47	11.49	4	2	3
Kakuzi Ltd	1	17.98	179.21	20.23	10.66	1	2	3
Bamburi Cement Ltd.	4	22.40	-7.33	14.69	9.11	4	2	3
Carbacid Investments Ltd.*	4	22.89	97.82	17.00	8.79	1	2	3
Kenya Natoinal Mills Ltd*	4	31.47	41.79	14.27	7.63	2	2	4
E.A. Breweries Ltd.*	4	48.84	119.15	17.01	7.10	1	2	4
National Bank Of Kenya Ltd	3	35.64	19.96	1.28	6.80	3	4	4
CMC Holdings	2	30.67	12.93	3.76	6.34	4	4	4
Pearl Dry Cleaners Ltd	2	50.37	12.12	6.70	6.06	4	3	4
Jubilee Insurance Company Ltd	3	56.15	46.63	5.07	4.43	2	3	4
Car & General (K) Ltd	2	53.94	32.33	7.25	3.25	2	3	4
Pan African Insurance Co. Ltd.	3	51.80	17.50	3.80	2.65	3	4	4
Oi Pejeta Ranching Ltd	1	32.97	29.47	4.21	1.39	2	4	4
Unga Group Ltd	4	67.34	0.66	4.49	-4.59	4	4	4
Kenya Power & Lighting Co. Ltd.	4	-8.71	18.17	-1.41	-25.26	3	4	4
Kenya Orchards Ltd.	4		159.21			1		
Rea Vipingo Plantations	1							
Kenya Airways Ltd.*	2							
TPS (Serena Ltd)	2							
Atthi River Mining Ltd.	4							

Company	Sec	DPOR94	gToAS94	ReOnAs94	REToEQ94	CgToAs94	CReOnAs94	CREToEQ94
Kenya Tea Company Ltd.	1	71.99	-58.19	41.08	67.19	4	1	1
Barclays Bank of Kenya Ltd	3	43.17	8.99	8.27	64.00	3	3	1
Kenya Airways Ltd.*	2	0.00			56.55			1
Chumi Super Markets Ltd	2	74.02	22.55	26.85	48.61	2	1	1
Kenya Oil Co. Ltd.	4	19.12	4.30	39.57	48.04	3	1	1
Westone East Africa (1969) Ltd.	4	75.83	-0.69	52.79	45.19	4	1	1
Standard Chartered Bank	3	88.29	10.53	4.63	38.44	3	4	1
Kenya Commercial Bank Ltd.	3	19.34	57.38	5.70	36.87	1	4	1
BOC Kenya Ltd	4	75.12	-5.15	14.97	36.06	4	2	1
Kenya Power & Lighting Co. Ltd.	4	5.19	24.96	8.81	32.85	2	3	1
Unipol Kenya Ltd.	4	37.99	16.25	42.52	32.44	2	1	1
ABC Bank Ltd	3	35.75	36.47	8.88	32.43	1	3	1
Butchings Biemer Ltd	2	14.03	15.95	4.72	32.08	2	4	2
ABC Bank Ltd.	3	16.51	38.93	9.06	31.36	1	3	2
Kenhro Motors (E.A) Ltd	2	89.02	114.16	21.39	31.01	1	1	2
E.A. Cables Ltd.	4	61.16	10.81	40.78	30.48	3	1	2
Diamond Trust Bank Ltd	3	35.40	34.03	6.24	28.30	2	3	2
City Trust Ltd*	3	42.70	23.85	13.42	27.07	2	2	2
Express Kenya Ltd	2	61.22	67.78	13.71	23.71	1	2	2
E.C.D.C Investments Co.	3	56.16	18.01	20.28	22.91	2	2	2
Station Printers and Publishers Ltd	2	13.63	22.60	25.36	22.26	2	1	2
Maagads Ltd	1	57.35	123.12	37.47	22.00	1	1	2
Brown Berger Ltd.	4	76.33	7.49	24.39	21.16	3	1	2
Sasini Tea & Coffee Ltd.	1	79.15	-5.64	26.37	20.86	4	1	2
E.A. Packaging Industries Ltd.*	4	40.57	22.80	16.61	18.39	2	2	3
Housing Finance Company Of Kenya Ltd	3	41.57	20.79	5.49	18.26	2	4	3
Total Kenya Ltd.	4	40.43	7.47	22.60	17.57	3	1	3
E.A. Portland Cement Ltd.*	4	10.74	352.95	3.51	16.53	1	4	3
BAT Kenya Ltd	4	61.65	34.48	18.05	14.68	2	2	3
Yakuzi Ltd	1	19.25	8.70	16.96	13.24	3	2	3
CMC Holdings	2	19.55	53.94	8.60	12.51	1	3	3
Kenya National Mills Ltd*	4	28.99	-1.84	14.97	12.15	4	2	3
A. Baumann & Co Ltd	2	0.84	68.48	15.55	11.91	1	2	3
Marshall's E.A Ltd	2	39.25	11.39	14.78	9.30	2	2	3
Carbacid Investments Ltd.*	4	26.80	5.02	13.31	9.11	3	2	3
National Bank Of Kenya Ltd	3	8.08	36.97	2.82	8.47	1	4	3
Brooke Bond Kenya Ltd.	1	59.61	-6.33	9.42	7.10	4	3	4
Pearl Dry Cleaners Ltd	2	49.36	5.09	8.83	6.89	3	3	4
The Standard Newspaper Ltd	2	0.00	-15.03	10.60	6.56	4	3	4
Pan African Insurance Co. Ltd.	3	30.62	10.37	5.98	5.90	3	4	4
Unga Group Ltd	4	40.43	36.70	12.37	5.31	1	2	4
Bamburi Cement Ltd.	4	64.86	-6.51	11.96	4.99	4	3	4
Car & General (K) Ltd	2	51.27	-2.46	7.72	4.94	4	3	4
Jubilee Insurance Company Ltd	3	67.20	35.99	4.73	3.27	1	4	4
E.A. Breweries Ltd.*	4	143.57	5.40	7.45	2.45	3	3	4
George Williamson Kenya Ltd*	1	85.24	-3.26	4.66	1.01	4	4	4
OI Pejeta Ranching Ltd	1	(88.40)	0.67	3.44	-0.40	3	4	4
Kapchorua Tea Company Ltd*	1	-42.98	-14.84	-1.40	-2.06	4	4	4
Kenya Orchards Ltd.	4		129.45			1		
Rea Vipingo Plantations	1							
TPS (Serena Ltd)	2							
Athi River Mining Ltd.	4							

Company	Sec	DPOR95	gToAs95	ReOnAs95	REToEQ95	CgToAs95	CReOnAs95	CREToEQ95
City Trust Ltd*	3	7.22	69.07	56.49	83.51	1	1	1
Prestone East Africa (1969) Ltd.	4	76.15	39.00	55.83	53.50	1	1	1
Standard Chartered Bank	3	72.97	5.24	6.65	53.11	4	3	1
Barclays Bank of Kenya Ltd	3	50.52	7.88	7.17	46.72	3	3	1
ABC Bank Ltd	3	30.12	37.99	10.39	43.05	1	2	1
Kenya Power & Lighting Co. Ltd.	4	3.04	36.55	12.59	39.78	2	2	1
ABC Bank Ltd.	3	15.74	40.06	7.65	38.34	1	2	1
ABC Kenya Ltd	4	70.23	0.50	14.74	37.28	4	2	1
Chumi Super Markets Ltd	2	94.87	9.46	23.35	37.20	3	1	1
Kenya Commercial Bank Ltd.	3	21.28	-4.49	6.35	36.94	4	3	1
Kenro Motors (E.A) Ltd	2	60.77	104.12	18.62	36.48	1	1	1
Postal Kenya Ltd.	4	23.19	16.45	25.48	33.47	3	1	1
Unipol Kenya Ltd.	4	45.30	33.73	40.81	33.33	2	1	1
C.D.C Investments Co.	3	57.37	18.77	24.08	28.24	2	1	2
Dea Vipingo Plantations	1	30.42		15.44	26.12		2	2
Hutchings Biemer Ltd	2	13.89	719.47	4.60	25.34	1	4	2
Kenya Airways Ltd *	2	0.00	26.14	18.28	25.30	2	1	2
E.A. Cables Ltd.	4	68.73	6.87	31.71	25.03	3	1	2
Muru Tea Company Ltd.	1	83.23	-15.29	25.56	22.85	4	1	2
Station Printers and Publishers Ltd	2	13.71	28.48	26.28	20.37	2	1	2
Diamond Trust Bank Ltd	3	40.30	17.03	5.38	20.26	2	3	2
Express Kenya Ltd	2	55.40	35.93	11.84	19.23	2	2	2
Kenya Oil Co. Ltd.	4	34.18	83.52	19.66	16.65	1	1	2
CMC Holdings	2	16.61	29.19	8.79	16.03	2	2	2
Housing Finance Company Of Kenya Ltd	3	38.13	23.41	4.38	15.21	2	4	2
BAT Kenya Ltd	4	75.76	-7.53	16.80	14.41	4	2	2
E.A. Packaging Industries Ltd.*	4	54.74	15.01	14.24	12.89	3	2	3
Carbacid Investments Ltd.*	4	28.70	11.54	19.78	12.60	3	1	3
National Bank Of Kenya Ltd	3	81.03	3.93	3.54	12.37	4	4	3
Crown Berger Ltd.	4	69.78	35.84	13.38	8.30	2	2	3
Unga Group Ltd	4	23.19	5.54	13.36	7.23	3	2	3
Bamburi Cement Ltd.	4	31.14	192.79	16.85	6.87	1	1	3
Marshall's E.A Ltd	2	48.14	73.27	12.71	6.45	1	2	3
Maagads Ltd	1	50.39	-7.50	7.01	6.00	4	3	3
E.A. Breweries Ltd.*	4	78.40	4.60	10.90	5.00	4	2	3
E.A. Portland Cement Ltd.*	4	44.64	26.45	2.34	4.86	2	4	3
Makuzi Ltd	1	57.87	5.39	6.44	4.33	3	3	3
Pearl Dry Cleaners Ltd	2	80.15	5.49	6.54	4.11	3	3	3
A.Baumann & Co Ltd	2	26.35	-7.63	5.31	3.79	4	3	4
Jubilee Insurance Company Ltd	3	53.85	18.11	4.28	3.41	2	4	4
Sasini Tea & Coffee Ltd.	1	99.54	227.74	6.85	3.33	1	3	4
Kenya National Mills Ltd*	4	207.23	15.26	5.24	1.72	3	3	4
Kapchorua Tea Company Ltd*	1	72.75	6.78	2.40	1.62	3	4	4
Pan African Insurance Co. Ltd.	3	71.51	52.30	1.95	1.42	1	4	4
George Williamson Kenya Ltd*	1	73.66	-0.62	4.91	1.17	4	3	4
Brooke Bond Kenya Ltd.	1	97.78	7.72	2.99	0.87	3	4	4
Car & General (K) Ltd	2	210.28	4.52	4.84	0.16	4	3	4
Oi Pejeta Ranching Ltd	1	(240.17)	440.25	4.18	-0.15	1	4	4
The Standard Newspaper Ltd	2	0.00	55.46	-1.61	-9.34	1	4	4
Kenya Orchards Ltd.	4		34.35			2		
TPS (Serena Ltd)	2							
Athi River Mining Ltd.	4							

COMPANY	Sector	DivPayRat96	gToAsset96	ReOnAs96	REToEQ96	CgToAsset96	CReOnAs96	CREToE
Firestone East Africa (1969) Ltd.	4	67.27	3.83	50.48	46.65	3	1	
BOC Kenya Ltd	4	54.26	17.97	16.37	45.35	1	2	
Barclays Bank of Kenya Ltd	3	51.92	13.97	7.33	43.26	2	3	
Uchumi Super Markets Ltd	2	77.04	10.10	23.77	41.45	2	1	
Standard Chartered Bank	3	53.79	13.24	6.08	41.36	2	3	
NIC Bank Ltd	3	28.09	17.92	8.72	34.79	1	3	
Limuru Tea Company Ltd.	1	73.56	5.86	38.43	33.57	3	1	
Kenya Commercial Bank Ltd.	3	31.40	17.88	6.40	30.73	1	3	
Kenya Power & Lighting Co. Ltd.	4	12.62	16.35	9.68	28.74	1	2	
E.A. Cables Ltd.	4	68.62	10.71	36.48	28.53	2	1	
I.C.D.C Investments Co.	3	74.18	13.97	21.79	27.92	2	1	
The Standard Newspaper Ltd	2	50.24	-8.35	13.12	24.51	4	2	
Dunlop Kenya Ltd.	4	47.01	13.58	27.45	23.99	2	1	
Rea Vipingo Plantations	1	50.78	-1.25	17.91	22.86	4	1	
Hutchings Biemer Ltd	2	12.81	17.23	2.27	22.16	1	4	
Lonhro Motors (E.A) Ltd	2	60.45	37.38	13.50	21.52	1	2	
Nation Printers and Publishers Ltd	2	15.80	43.83	23.24	20.61	1	1	
Housing Finance Company Of Kenya Ltd	3	45.48	22.88	5.86	19.33	1	3	
Total Kenya Ltd.	4	80.89	20.62	17.06	18.51	1	1	
CMC Holdings	2	15.42	19.95	14.00	18.27	1	2	
BAT Kenya Ltd	4	71.29	-0.46	20.21	17.45	4	1	
Kenya Oil Co. Ltd.	4	30.26	7.24	21.08	16.62	3	1	
CFC Bank Ltd.	3	26.58	9.79	5.69	15.89	2	3	
National Bank Of Kenya Ltd	3	59.72	33.91	4.23	15.74	1	4	
Kenya Airways Ltd.*	2	40.66	10.66	12.76	14.37	2	2	
City Trust Ltd*	3	25.72	12.69	19.28	14.24	2	1	
Carbacid Investments Ltd.*	4	31.94	6.20	20.86	12.21	3	1	
TPS (Serena Ltd)	2	199.15		25.67	9.99		1	
E.A. Breweries Ltd.*	4	45.14	7.23	11.90	9.87	3	2	
Express Kenya Ltd	2	59.31	-16.42	5.25	9.09	4	3	
Kenya Natoinal Mills Ltd*	4	49.69	-3.85	13.45	9.00	4	2	
Kakuzi Ltd	1	30.35	9.45	9.65	8.54	2	2	
Bamburi Cement Ltd.	4	51.24	-0.80	13.25	7.49	4	2	
E.A. Portland Cement Ltd.*	4	66.30	-3.51	2.81	6.40	4	4	
Athi River Mining Ltd.	4	55.42		13.42	6.21		2	
Eaagads Ltd	1	49.29	0.69	6.83	5.95	3	3	
Marshalls E.A Ltd	2	52.98	-1.76	9.06	5.88	4	2	
Kapchorua Tea Company Ltd*	1	31.09	8.28	5.68	5.47	3	3	
George Williamson Kenya Ltd*	1	22.81	3.43	8.15	5.42	3	3	
Jubilee Insurance Company Ltd	3	63.72	10.75	4.86	3.53	2	4	
Brooke Bond Kenya Ltd.	1	59.11	-10.22	3.63	3.01	4	4	
Sasini Tea & Coffee Ltd.	1	99.85	1.47	4.35	2.76	3	4	
Pearl Dry Cleaners Ltd	2	63.14	92.20	2.40	2.45	1	4	
Pan African Insurance Co. Ltd.	3	43.91	4.77	3.72	2.32	3	4	
Unga Group Ltd	4	80.89	14.49	5.23	1.82	1	3	
E.A. Packaging Industries Ltd.*	4	0.00	-4.78	7.59	1.67	4	3	
A.Baumann & Co Ltd	2	0.22	5.01	-2.35	1.07	3	4	
Crown Berger Ltd.	4	406.75	11.59	8.69	0.95	2	3	
Ol Pejeta Ranching Ltd	1	(29.44)	-11.73	0.87	-0.21	4	4	
Diamond Trust Bank Ltd	3	-69.52	4.52	-1.47	-7.18	3	4	
Car & General (K) Ltd	2	0.00	-10.51	-5.47	-23.74	4	4	
Kenya Orchards Ltd.	4		11.87			2		

Company	Sec	DPOR97	gToAs97	ReOnAs97	REToEQ97	CgToAs97	CReOnAs97	CREToEQ97
Limuru Tea Company Ltd.	A	78.00	68.82	65.21	59.60	1	1	1
BOC Kenya Ltd	I	47.98	-5.55	19.14	48.98	4	1	1
Firestone East Africa (1969) Ltd.	I	69.19	16.62	40.51	39.80	1	1	1
Barclays Bank of Kenya Ltd	F	57.42	14.94	7.02	39.11	2	3	1
The Standard Newspaper Ltd	C	25.06	18.84	20.63	35.92	1	1	1
Uchumi Super Markets Ltd	C	89.35	19.11	24.25	34.59	1	1	1
Standard Chartered Bank	F	58.05	6.29	5.54	33.02	3	4	1
Kenya Power & Lighting Co. Ltd.	I	27.19	14.42	11.85	31.00	2	2	1
Kenya Commercial Bank Ltd.	F	34.97	7.76	7.09	26.17	3	3	1
NIC Bank Ltd	F	33.09	11.36	7.77	23.34	2	3	1
Nation Printers and Publishers Ltd	C	17.24	10.79	26.22	22.38	3	1	1
E.A. Portland Cement Ltd.*	I	23.95	4.15	11.71	22.10	3	2	1
George Williamson Kenya Ltd*	A	23.59	23.56	25.31	21.79	1	1	1
I.C.D.C Investments Co.	F	86.65	14.52	17.79	21.13	2	2	1
Housing Finance Company Of Kenya Ltd	F	46.44	14.65	5.73	20.41	2	4	2
Kenya Airways Ltd.*	C	35.08	19.67	11.04	20.19	1	2	2
Kenya Oil Co. Ltd.	I	21.17	6.59	25.18	20.01	3	1	2
Diamond Trust Bank Ltd	F	30.13	-19.04	-3.98	19.70	4	4	2
E.A. Cables Ltd.	I	63.35	16.44	30.48	19.61	2	1	2
Kapchorua Tea Company Ltd*	A	39.34	32.15	20.88	19.09	1	1	2
CFC Bank Ltd.	F	25.97	11.40	7.55	17.40	2	3	2
City Trust Ltd*	F	24.73	9.52	19.64	17.19	3	1	2
BAT Kenya Ltd	I	70.97	8.71	18.67	16.72	3	2	2
CMC Holdings	C	16.13	14.21	13.01	15.20	2	2	2
Eaagads Ltd	A	51.16	20.21	20.85	15.15	1	1	2
Carbacid Investments Ltd.*	I	25.68	11.68	23.91	14.86	2	1	2
Total Kenya Ltd.	I	112.18	-0.96	13.90	14.12	4	2	2
Rea Vipingo Plantations	A	40.27	12.60	12.33	12.12	2	2	3
National Bank Of Kenya Ltd	F	64.48	27.17	2.34	11.65	1	4	3
O! Pejeta Ranching Ltd	A	1.04	6.04	2.67	9.37	3	4	3
Kakuzi Ltd	A	26.64	36.46	13.24	8.54	1	2	3
TPS (Serena Ltd)	C	85.36	-6.95	12.32	8.49	4	2	3
Dunlop Kenya Ltd.	I	45.92	35.68	9.66	8.40	1	3	3
Crown Berger Ltd.	I	65.52	-8.28	12.97	7.74	4	2	3
Bamburi Cement Ltd.	I	52.31	7.65	12.93	7.35	3	2	3
Unga Group Ltd	I	112.18	-2.23	13.83	5.47	4	2	3
Athi River Mining Ltd.	I	64.53	15.58	9.15	4.90	2	3	3
Express Kenya Ltd	C	59.72	3.02	7.52	4.90	3	3	3
Sasini Tea & Coffee Ltd.	A	76.39	2.82	6.98	4.28	3	3	3
Jubilee Insurance Company Ltd	F	39.10	24.62	4.85	4.15	1	4	3
Pan African Insurance Co. Ltd.	F	35.29	3.91	4.30	3.60	3	4	4
Marshalls E.A Ltd	C	39.32	-0.47	6.62	2.99	4	3	4
E.A. Breweries Ltd.*	I	302.25	11.12	6.29	1.82	2	3	4
A.Baumann & Co Ltd	C	2.21	1.09	-0.45	-1.66	4	4	4
Lonhro Motors (E.A) Ltd	C	0.00	39.99	3.51	-4.49	1	4	4
Brooke Bond Kenya Ltd.	A	0.00	-6.02	6.32	-4.50	4	3	4
E.A. Packaging Industries Ltd.*	I	0.00	-5.24	2.93	-10.78	4	4	4
Pearl Dry Cleaners Ltd	C	0.00	-9.24	-12.65	-20.42	4	4	4
Car & General (K) Ltd	C	0.00	-21.36	6.19	-34.86	4	3	4
Hutchings Biemer Ltd	C	0.00	11.16	-10.48	-35.67	2	4	4
Kenya Natoinal Mills Ltd*	I	-2.43	47.98	-10.65	-42.19	1	4	4
Kenya Orchards Ltd.	I		4.17			3		

COMPANY	Sector	REoE98	DPOR98	gTA98	RoA98	CARoE8	CARoA8	CAGIA8
I.tea	1	65.44	81.88	2.01	59.79	1	1	3
Fire	4	32.58	68.18	5.89	35.77	1	1	3
Eaag	1	26.48	62.67	19.44	33.54	1	1	1
BAT	4	26.38	48.62	9.67	29.19	1	1	2
Cables	4	18.23	63.59	10.70	28.48	2	1	2
Uchumi	2	42.37	71.97	14.12	27.79	1	1	2
Carb	4	17.93	43.48	17.36	27.10	2	1	1
NPP	2	21.20	18.01	9.58	26.76	1	1	2
ICDC	3	25.70	56.61	16.45	22.48	1	1	2
Kenol	4	18.79	25.35	37.27	21.84	2	1	1
Total	4	29.94	52.33	6.46	20.24	1	1	2
BOC	4	53.29	44.80	-1.28	20.07	1	1	4
TPS	2	11.82	58.28	3.38	11.97	2	2	3
CMC	2	11.30	7.82	-1.23	11.91	2	2	4
EAB	4	13.54	60.91	-1.91	11.91	2	2	4
Berger	4	4.03	95.40	-13.37	11.48	3	2	4
C&G	2	-11.96	0.00	-4.10	10.71	4	2	4
KPLC	4	24.18	28.86	3.08	10.46	1	2	3
Rea	1	8.93	0.00	5.99	9.69	2	2	3
Sasini	1	5.15	93.69	2.75	8.31	3	2	3
Bbond	1	4.33	85.11	-7.31	7.77	3	2	4
Dun	4	5.72	66.15	5.85	7.40	3	2	3
Kakuzi	1	5.46	40.22	10.91	6.70	3	2	2
Express	2	3.73	61.46	-0.36	6.68	3	2	4
SCB	3	35.79	57.66	16.11	6.48	1	2	2
BBK	3	36.72	56.57	16.18	6.48	1	2	2
Snews	2	-2.96	-47.59	65.74	6.46	4	2	1
CFC	3	13.85	28.01	2.75	6.22	2	2	3
KQ	2	15.70	0.00	32.25	6.14	2	2	1
VIC	3	16.33	37.13	-8.23	5.68	2	3	4
CTrust	3	4.25	99.98	-0.18	5.14	3	3	4
Athi	4	1.78	0.00	12.72	5.07	4	3	2
Bamb.	4	5.39	47.89	5.28	5.02	3	3	3
Pan	3	3.81	33.01	5.20	4.92	3	3	3
Jubilee	3	4.02	45.06	4.33	4.14	3	3	3
EAPac	4	-8.13	0.00	-2.92	3.84	4	3	4
HFCK	3	18.50	60.37	27.60	3.74	2	3	1
Kapch	1	4.50	41.44	6.93	3.41	3	3	2
GWK	1	2.96	37.29	32.31	3.19	3	3	1
DTB	3	21.77	30.79	-11.20	3.03	1	3	4
Pejeta	1	1.06	12.65		2.05	4	4	4
KCB	3	9.02	73.59	6.75	1.85	2	4	2
Baum	2	0.75	84.88	17.57	0.96	4	4	1
Lonhro	2	-65.61	0.00	-13.64	-1.75	4	4	4
Knmill	4	-25.08	0.00	-13.29	-1.98	4	4	4
NBK	3		-3.54	-17.14	-2.76	4	4	4
Marsh	2	-21.86	0.00	-19.09	-4.57	4	4	4
Hutch	2	0.69	0.00	280.73	-6.25	4	4	1
Unga	4	-21.72	52.33	34.41	-7.74	4	4	1
Pearl	2	-32.39	0.00	-10.78	-18.01	4	4	4
Port	4		0.00	4.18	-19.94	4	4	3
Richard	4			-4.86				4

Code	ARoE	ARoA	AgIA	DPOR	CARoE	CARoA	CAGIA
Hutch	24.77	-0.17	163.84	12.42	2	4	1
Pejeta	1.55	2.94	77.39	-16.49	4	4	1
Port	13.92	4.52	69.45	20.36	2	4	1
Bamb.	7.09	12.57	53.95	37.94	4	2	1
Lonhro	16.24	13.69	46.01	51.13	2	2	1
Sasini	14.83	21.49	44.44	78.50	2	1	1
Kakuzi	8.36	10.95	37.65	34.69	3	3	1
Bbond	11.46	15.31	35.55	70.39	3	2	1
Berger	10.89	16.56	32.88	116.11	3	2	1
Eaag	17.70	24.98	31.19	31.89	2	1	1
Kenol	20.88	19.84	27.75	34.54	2	1	1
EAB	9.11	11.44	25.04	98.27	3	2	1
GWK	8.02	11.26	24.67	37.83	4	2	1
Carb	11.98	18.69	23.30	30.66	3	1	2
CFC	22.05	6.11	23.28	24.48	2	3	2
Ltea	76.99	56.97	23.10	85.65	1	1	2
NPP	17.16	22.15	22.22	24.13	2	1	2
Dun	25.37	30.18	22.22	40.92	1	1	2
CTrust	26.82	22.17	22.19	34.48	1	1	2
KQ	26.42	12.05	22.18	15.15	1	2	2
Jubilee	4.96	4.76	22.01	51.28	4	4	2
KCB	27.25	5.00	21.31	36.55	1	4	2
Kapch	8.23	10.70	20.59	21.46	3	3	2
HFCK	15.69	4.41	20.12	47.70	2	4	2
Unga	-0.95	5.50	20.01	64.21	4	3	2
BBK	43.08	6.50	19.48	54.86	1	3	2
Express	17.02	11.30	19.10	57.59	2	2	3
Snews	12.33	5.28	18.74	3.46	3	3	3
Total	35.00	22.20	18.62	64.21	1	1	3
NIC	32.91	7.54	18.52	32.65	1	3	3
Pan	3.36	3.91	18.41	42.00	4	4	3
Baum	7.00	5.07	17.24	19.58	4	4	3
KPLC	18.10	7.66	17.14	14.81	2	3	3
CMC	11.16	8.39	17.00	21.52	3	3	3
NBK	12.55	1.99	16.45	38.39	3	4	3
BAT	21.95	23.51	15.37	69.25	2	1	3
Uchumi	40.56	28.53	15.07	81.90	1	1	3
Athi	4.30	9.21	14.15	39.99	4	3	3
Pearl	-2.74	0.93	14.14	44.21	4	4	3
SCB	36.51	5.16	13.52	63.00	1	3	4
ICDC	20.37	17.82	13.35	71.57	2	2	4
Cables	25.54	34.08	13.17	59.83	1	1	4
Knmill	-4.99	4.87	13.12	43.00	4	4	4
Fire	47.55	60.63	12.93	67.33	1	1	4
BOC	37.35	15.33	12.91	55.45	1	2	4
DTB	17.99	3.16	11.72	23.22	2	4	4
EAPac	12.45	15.40	11.68	23.04	3	2	4
Marsh	8.33	8.07	11.32	28.89	3	3	4
Rea	17.51	13.84	5.78	30.37	2	2	4
C&G	-7.34	5.46	-0.56	54.64	4	3	4
TPS	10.10	16.65	-1.79	114.26	3	2	4

APPENDIX 5:

RESULTS OF CORRELATION

MTB > # Opening worksheet from file: C:\EXCHANGE\KURIA\AVEDAT~1.XLS

MTB > # File was last modified on 10/11/100

MTB > Correlation 'AvRoE'-'AvDPOR'.

Correlations (Pearson)

	AvRoE	AvRoA	AvgIA
AvRoA	0.650		
AvgIA	-0.014	-0.179	
AvDPOR	0.236	0.414	-0.286

MTB > # Opening worksheet from file: C:\EXCHANGE\KURIA\GTOASS~1.XLS

MTB > # File was last modified on 10/11/100

MTB > Correlation 'GTA97/98' 'DPT98'.

Correlations (Pearson)

Correlation of GTA97/98 and DPT98 = -0.188

MTB > Correlation 'GTA96/97' 'DPR97'.

Correlations (Pearson)

Correlation of GTA96/97 and DPR97 = 0.020

MTB > Correlation 'GTA 95/9' 'DPR96'.

Correlations (Pearson)

Correlation of GTA 95/9 and DPR96 = 0.073

MTB > Correlation 'GTA94/95' 'DPR95'.

Correlations (Pearson)

Correlation of GTA94/95 and DPR95 = -0.440

MTB > Correlation 'GTA 93/9' 'DPR94'.

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Correlations (Pearson)

Correlation of GTA 93/9 and DPR94 = -0.093

MTB > Correlation 'DPT93' 'GTA92/93'.

Correlations (Pearson)

Correlation of DPT93 and GTA92/93 = 0.264

MTB > Correlation 'GTA91/92' 'DPR92'.

Correlations (Pearson)

Correlation of GTA91/92 and DPR92 = 0.007

MTB > # Opening worksheet from file: C:\EXCHANGE\KURIA\REONAS.XLS

MTB > # File was last modified on 10/11/100

MTB >

APPENDIX 5:

MTB > # Opening worksheet from file: C:\EXCHANGE\KURIA\REONAS.XLS

MTB > # File was last modified on 10/11/100

MTB > Correlation 'RoA98' 'DPT98'.

Correlations (Pearson)

Correlation of RoA98 and DPT98 = 0.402

MTB > Correlation 'RoA97' 'DPR97'.

Correlations (Pearson)

Correlation of RoA97 and DPR97 = 0.214

MTB > Correlation 'RoA96' 'DPR96'.

Correlations (Pearson)

Correlation of RoA96 and DPR96 = 0.200

MTB > Correlation 'DPR95' 'RoA95'.

Correlations (Pearson)

Correlation of DPR95 and RoA95 = -0.027

MTB > Correlation 'RoA94' 'DPR94'.

Correlations (Pearson)

Correlation of RoA94 and DPR94 = 0.298

MTB > Correlation 'RoA93' 'DPT93'.

Correlations (Pearson)

Correlation of RoA93 and DPT93 = 0.335

MTB > Correlation 'RoA92' 'DPR92'.

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Correlations (Pearson)

Correlation of RoA92 and DPR92 = 0.391

MTB > Correlation 'RoA91' 'DPR91'.

Correlations (Pearson)

Correlation of RoA91 and DPR91 = 0.247

MTB > # Opening worksheet from file: C:\EXCHANGE\KURIA\RETOEQ.XLS

MTB > # File was last modified on 10/11/100

MTB > Correlation 'RoEq98' 'DPT98'.

Correlations (Pearson)

Correlation of RoEq98 and DPT98 = 0.435

MTB > Correlation 'RoEq97' 'DPR97'.

Correlations (Pearson)

Correlation of RoEq97 and DPR97 = 0.223

MTB > Correlation 'RoEq96' 'DPR96'.

Correlations (Pearson)

Correlation of RoEq96 and DPR96 = 0.028

MTB > Correlation 'RoEq95' 'DPR95'.

Correlations (Pearson)

Correlation of RoEq95 and DPR95 = -0.097

MTB > Correlation 'DPR94' 'RoEq94'.

Correlations (Pearson)

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Correlation of DPR94 and RoEq94 = 0.157

MTB > Correlation 'DPT93' 'RoEq93'.

Correlations (Pearson)

Correlation of DPT93 and RoEq93 = 0.354

MTB > Correlation 'RoEq92' 'DPR92'.

Correlations (Pearson)

Correlation of RoEq92 and DPR92 = 0.203

MTB > Correlation 'RoEq91' 'DPR91'.

Correlations (Pearson)

Correlation of RoEq91 and DPR91 = 0.106

MTB > Stop.

APPENDIX 6 : RESULTS OF LAGGING

MTB>Correlation 'DPR91' 'RoEq92'
Correlations (Pearson) Correlation of DPR91 and RoEq92 = -0.060
MTB>Correlation 'DPR92' 'RoEq93'
Correlations (Pearson) Correlation of DPR92 and RoEq93 = 0.298
MTB>Correlation 'DPT92' 'RoEq94'
Correlations (Pearson) Correlation of DPT92 and RoEq94 = 0.317
MTB>Correlation 'DPR94' 'RoEq95'
Correlations (Pearson) Correlation of DPR94 and RoEq95 = 0.175
MTB>Correlation 'DPR95' 'RoEq96'
Correlations (Pearson) Correlation of DPR95 and RoEq96 = -0.071
MTB>Correlation 'DPR96' 'RoEq97'
Correlations (Pearson) Correlation of DPR96 and RoEq97 = 0.037
MTB>Correlation 'DPR97' 'RoEq98'
Correlations (Pearson) Correlation of DPR97 and RoEq98 = 0.312
MTB>Correlation 'DPR91' 'RoA92'
Correlations (Pearson) Correlation of DPR91 and RoA92 = 0.221
MTB>Correlation 'DPR92' 'RoA93'
Correlations (Pearson) Correlation of DPR92 and RoA93 = 0.320
MTB>Correlation 'DPT93' 'RoA94'
Correlations (Pearson) Correlation of DPT93 and RoA94 = 0.271
MTB>Correlation 'DPR94' 'RoA95'
Correlations (Pearson) Correlation of DPR94 and RoA95 = 0.240
MTB>Correlation 'DPR95' 'RoA96'
Correlations (Pearson) Correlation of DPR95 and RoA96 = 0.065
MTB>Correlation 'DPR96' 'RoA97'
Correlations (Pearson) Correlation of DPR96 and RoA97 = 0.144
MTB>Correlation 'DPR97' 'RoA98'
Correlations (Pearson) Correlation of DPR97 and RoA98 = 0.271
MTB>Correlation 'DPR92' 'GTA93/9'
Correlations (Pearson) Correlation of DPR91 and GTA93/9 = -0.214
MTB>Correlation 'DPT93' 'GTA94/95'
Correlations (Pearson) Correlation of DPT93 and GTA94/95 = 0.059
MTB>Correlation 'DPR95' 'GTA96/97'
Correlations (Pearson) Correlation of DPR95 and GTA96/97 = 0.081
MTB>Correlation 'DPR96' 'GTA97/98'
Correlations (Pearson) Correlation of DPR96 and GTA97/98 = -0.137
MTB>Correlation 'DPR91' 'RoEq92'
Correlations (Pearson) Correlation of DPR91 and RoEq92 = -0.060
MTB>Correlation 'DPR92' 'RoEq93'
Correlations (Pearson) Correlation of DPR92 and RoEq93 = 0.298
MTB>Correlation 'DPT93' 'RoEq94'
Correlations (Pearson) Correlation of DPT93 and RoEq94 = 0.317
MTB>Correlation 'DPR94' 'RoEq95'
Correlations (Pearson) Correlation of DPR94 and RoEq95 = 0.0175

APPENDIX 6

MTB>Correlation 'DPR95' 'RoEq96'
Correlations (Pearson) Correlation of DPR95 and RoEq96 = -0.071
MTB>Correlation 'DPR96' 'RoEq97'
Correlations (Pearson) Correlation of DPR96 and RoEq97 = 0.037
MTB>Correlation 'DPR97' 'RoEq98'
Correlations (Pearson) Correlation of DPR97 and RoEq98 = 0.312
MTB>Correlation 'DPR91' 'RoA92'
Correlations (Pearson) Correlation of DPR91 and RoA92 = 0.221
MTB>Correlation 'DPR92' 'RoA93'
Correlations (Pearson) Correlation of DPR92 and RoA93 = 0.320
MTB>Correlation 'DPT93' 'RoA94'
Correlations (Pearson) Correlation of DPT93 and RoA94 = 0.271
MTB>Correlation 'DPR94' 'RoA95'
Correlations (Pearson) Correlation of DPR94 and RoA95 = 0.240
MTB>Correlation 'DPR95' 'RoA96'
Correlations (Pearson) Correlation of DPR95 and RoA96 = 0.065
MTB>Correlation 'DPR96' 'RoA97'
Correlations (Pearson) Correlation of DPR96 and RoA97 = 0.144
MTB>Correlation 'DPR97' 'RoA98'
Correlations (Pearson) Correlation of DPR97 and RoA98 = 0.271
MTB>Correlation 'DPR92' 'GTA93/9'
Correlations (Pearson) Correlation of DPR91 and GTA93/9 = -0.214
MTB>Correlation 'DPT93' 'GTA94/95'
Correlations (Pearson) Correlation of DPT93 and GTA94/95 = 0.059
MTB>Correlation 'DPR95' 'GTA96/97'
Correlations (Pearson) Correlation of DPR95 and GTA96/97 = 0.081
MTB>Correlation 'DPR96' 'GTA97/98'
Correlations (Pearson) Correlation of DPR96 and GTA97/98 = -0.137
MTB>Stop

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